Published by the Whole Earth Catalog

No. 30 Summer 1981 $4

COEVOLUTION

Quarterly

THE POLITICS OF PLACE
BY KARL HESS P. 4

FRISCO FELUCCA III

HOW NOT TO COMMIT SUICIDE
BY ART KLEINER P. 88

From R. Crumb's Sketch Book

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So Nu?

I'm Scared...

No.30 Summer 1981

CoEVOLUTION Quarterly

COVERS

For the front cover the task was to illustrate Karl Hess' lead article on "The Politics of Place." The political process itself usually looks pretty dumb, however gripping it may be to do, so instead we wound up with a picture of one goal of local politics: protecting the nuisance of freedom. Which also means protecting a community's uniqueness.

The gent on the front cover is a specimen of our town's – Sausalito's – uniqueness and freedom. He's Captain Tom Rockford, in his late '50s, lives anchored out on his lateen-rigged ferro-cement Frisco Felucca III, has cruised the Pacific, and plays dixieland cornet with the Captain's Band. His impromptu cornet solo concerts from his deck are one of the delights of living and working around this neighborhood. The photographer, Matt Herron, also lives on a sailboat hereabouts.

Captain Rockford is endangered; hundreds of other people equally unique to themselves and to this area are endangered. The problem is local politics, and so is the solution, if any. The trick will be, can the instruments of regulation be used to preserve an environment of irregular behavior? I would say probably, depending somewhat on the regulations but mostly on the people.

Typical. Typical issue, typical town. Your town is peculiar in other ways, and the pressures on it to be more like anywhere else (including Sausalito) should be laughed out of power. I just figured out what local means. Local means different.

The back cover is a glimpse of how pleasant a certain kind of agriculture can be. Author Philip Stewart's caption sings a little song of locality: "Hazel and sycamore coppice with oak standards and some birch; Childarditch Wood, Brentwood, Essex, England; photograph by F.R. Wigston."

–Stewart Brand (SB)

The CoEvolution Quarterly ▫ Issue No. 30 ▫ June 21, 1981. Publication number 077150. Published quarterly by POINT, a California non-profit corporation. Office of publication (editorial and subscription): Box 428, Sausalito, California 94966 (27 Gate 5 Road). Subscriptions: $14 per year. Inquire for international air rates. Second-class postage paid at Sausalito, California and at additional mailing offices. Claims for missing issues will not be honored later than three months after publication; foreign claims, five months.
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Subscription circulation: 32,013
Newsstand circulation: 10,000

POSTMASTER: Please send form 3547 or 3579.

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The Politics of Place

by Karl Hess

Illustrations by Phil Frank

IN THE BEGINNING there was the world – and everyone wanted to save it, savage it, change it, conserve it, Do Something To It. And then there was the self – and everyone wanted to soothe it, swaddle it, swallow it, salve it, solve it, suck it, succor it.

Then a sort of synthesis and practicality. If you want to make the world a certain kind of place in which to live, you have to make the self a certain kind of life. To change the world you must first change yourself. Imbedded in that was a revolution against the

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Karl Hess is invariably introduced, poor man, as the speechwriter for presidential hopeful Barry Goldwater ("Extremism in the defense of liberty is no vice. Moderation in the pursuit of justice is no virtue," etc. A variation, says ***Bartlett's Familiar Quotations****, on Thomas Paine's "Moderation in temper is always a virtue; but moderation in principle is always a vice.")*

Karl made his move from national to local politics some while back. His efforts to organize and enhance the diverse life of the Adams-Morgan neighborhood in Washington, DC are splendidly chronicled in his ***Community Technology*** *(NWEC p. 300). Now based in rural West Virginia, his recent activities include editing the new periodical* ***Survival Tomorrow*** *(reviewed on p. 38), and the title role in the 1981 Academy Award-winning short, "Karl Hess: Toward Liberty."*

Illustrator Phil Frank is known to many for his nationally syndicated daily comic strip "Travels With Farley." He lives on a houseboat two stone's throws from our office and is highly active in Sausalito politics, serving especially as a diplomatic reducer of tension in this sometimes polarized community.

Since I commissioned this article you might be interested a little bit in why. Having worked in national politics (Pentagon, Department of the Interior) and state politics (Governor's office), I was not ready for the much greater satisfaction of working in the politics of my town. Instead of an endless parade of strangers, here is a comfortably sized cast of characters – whose range of character, I might add, is considerably wider and more interesting than in our capitals. The deadly abstractions of remote government are here made immediate and real, and the feedback loops of citizen response are shorter, faster, and more accurate.

I am delighted with Karl's quick and professional response to my request. It puts local politics in a theoretical framework it badly needs. There are some things I would like to see gone into further, perhaps by other writers in other issues of ***CQ****. We need a great deal more discussion on technique – the value of persistence, for example, or the value of unflappability, of cordiality, of candor, of curiosity. Write.*

I am made positively wistful by Karl's discussion of good things that can be initiated on the local level. Here in Sausalito our entire effort – 10 to 20 unpaid hours a week for dozens of us – is in trying to head off bad things – voracious developers (not all are), unresponsive city officials (not all are), etc. The price of freedom, eternal vigilance, reach for the phone.

There's something else that many don't usually cop to, I guess because it looks selfish. Local politics is great fun and enormously rewarding. Talk to recent fugitive Abbie Hoffman (difficult now that he's in jail) who spent his hard underground time organizing to protect the St. Lawrence Seaway in northern New York State. Well, Abbie, did you save the river? "It saved me," he says.

–SB

mechanistic determinisms that had cranked us all up since Newton and Marx, Calvin and Falwell. Changing selves make changing times. If there are invisible hands they are nonetheless hands, human hands.

Good enough but not nearly enough. In between the world and the self there is a crucial terrain of action, human action. Once seen, the sight is ineradicable. It is the terrain of local place, the local place where you live. And just as ineluctably as the lesson of changing the self to change the world, its lesson is that in changing anything in the material world, and regardless of the lever you use, the fulcrum will be the place where you are. The march of a thousand miles begins with a single step, the view of the infinite universe is a sight from a single village, all tomorrow is perceived from a single today, every self on Earth is somewhere. We, all of us, even if intermittently, live in a place.

It is the processes and politics of place that will occupy many of us for a long time to come. What happens in those places, all poured together into the gulf where our world empties into and joins the universe will be very important work indeed, perhaps the most practical work we have ever done. These are gardens, these places where we live, and it is there that we set the seeds of our future not knowing, just hoping, that the harvest will be good. But, at least, we know that in such a place we do not just scatter seeds into the middle of air, pumping the air full of high talk and high times, only to have it all flop back to renounced ground sooner or later.

About the politics of place certain points may be made:

- **The politics of place does not discourage thinking intergalactically**, but it does discourage simply thinking intergalactically, or globally, without due consideration for what, concretely and currently, you can DO about it. René Dubos once said "think globally, act locally." That's the politics of place. (Obvious option: you can just think and act locally, if you wish. That may be no better than anything we already experience but it is also unlikely to be any worse.)

- **The politics of place is damage-limiting.** Mistakes made locally may be more easily corrected, have fewer externalities than mistakes made by, for instance, national or international planning bodies. To the argument that D.K. Ludwig's despoliation of the Amazon basin is politics of place but also regionally and perhaps globally devastating, it must be pointed out that Brazilian central planning organizations, and not local politics, made the adventure possible. Without Brazilian police power, courts, land condemnations, and so forth, a localist revolt or resistance against the immense invasion would at least be possible and would represent the politics of place as different from the politics of international finance. Actually, no project of such scale is even likely without state support.

- **The politics of place can be knowledgeable.** Even with a Cray I or II computer it is difficult to keep up with the conjoined weather of the world. You can, however, stick

your head out the window of the place where you live and see what's happening. Remote bureaucracies inevitably see your creek in terms of its average streamflow and depth. You can drown trying to cross a creek that averages four feet in depth. And you cannot constantly pump a million gallons from a stream that averages that flow. Sometimes it is dry. You know that and see that – locally.

• **The politics of place can be experimental.** Who knows, you and I and all our friends may be dead wrong about everything we say. Still, we will try to make our vision of the world more and more concrete. Doing it locally, on a laboratory scale, seems more decent than lunging to commissar commands for the entire globe or universe. Our neighbors in the universe might be pleased also; as we might be if they show the same patience.

• **The politics of place can be flexible.** A goof in a local garage means you change a cutting tool, reset the milling machine, heighten the chain hoist, close the windows on the corner experiment on oil-enhancing bacteria, or whatever. A goof at General Motors or perhaps Genentech, means goofing along to protect your investment. Mistakes, in large organizations are too costly to correct. They must be covered and continued.

• **The politics of place involves people.** The conventional politics of party and presidiums also involves people of course, but in a different way. The principal people display and deploy symbols or guns, the constituent people display voter registration or identity cards. In conventional politics, at its very best, which is right here, voters elect people to be citizens, to make arguments in and about shared spaces. But the voters are not citizens, just voters. In the politics of place, if only because of proximity and neighborliness, arguments about shared matters go on constantly and are not just part of a formal, occasional process even if such processes are present also.

In the politics of place people are constantly tempted to be involved, again by sheer proximity, while the politics of conventional representation or, worse, dictatorship is always far enough removed from everyday life to teeter on the brink of alienation, renunciation, or repression. Usually it falls over that brink.

• **The politics of place is gently federative.** The interests of people where they live inevitably flow toward immediately surrounding places, then to the universe or, at least, the region. But the impulses are generated from the interests of the people where they live and not by strangers with distant (not necessarily broader) views. High blown, universalizing fiats that descend like hammer blows on people all over are what we're used to and what many politicians and most ideologues aspire to. No one not seized by a brain fever, I feel, can any more truly believe that they or anyone else is wise enough to assume the ruler role of delivering those hammer blows from the fist of their own fervor. If we have learned anything over these years, if there is anything that binds us together in some shared attitude, all of us who read and write in places like this, it is that the king and the queen are dead – and should stay that way!

The gentle possibilities of federation for the politics of place could take off some of

the abrasive edges of ideology which have made it very difficult for long-term concerted action, by individuals and small communities of people, on great national or global issues.

Such action has meant that disparate interests have joined in very narrow causes (antinukes, for instance) that have in no way been able to mute ideological differences about many other issues. Meetings on federated issues have always been battlegrounds to fight out many causes other than the one immediately involved. On reason is that the cooperating groups, by and large, have been groups which are based upon debatable ideological points. Thus, people who oppose nuclear energy but also espouse state socialism may be offended, and become offensive, when antinuke folk who are, say, libertarian refuse to applaud tactics calling for state intervention in the nuclear industry. The point is that both the opposition to nuclear energy and the espousal of any particular larger system change are both wholly ideological and not practical issues for the people involved. They have no power to begin with and no practical way of offering alternatives. They must unite in negativity and even though that unity may produce vastly valuable results of public attention, little practical action can result. "Occupying" a reactor is an action, to be sure, but not a practical one. It is a media event, not a political and practical one.

On the other hand, when people are rooted in the politics of place, when they have an enduring place in a community, and a constituency of neighbors who will at least listen to them, they can enter into the largest sorts of federated activity without any hidden agendas or ideological reservations. They can, if they choose, go into the federated activity as representatives not of any ideology but simply as people from a real place. The interests of that community, in turn, are not likely to be the sort that anyone would even want to foist on anyone else. People with their feet solidly in a place, in a community, easily and commonly realize, it has been my observation, that their own situation is unique and that other situations are as unique as theirs. They recognize that rather than imposing ideologies upon each other, we urgently need to leave each other alone enough to get work done at home – so that if we wish, we can bring it full circle and enter into federated actions with others in other communities as prudence, practical prudence suggests.

To carry out the nuclear example one step farther: the only county in Maine which recently voted against the installation of a nuclear plant in that state was the very county in which the reactor would be located. For those people, nuclear energy is more than an ideological matter, it is part of their politics of place. The stronger their internal community, the more people have their neighbors' ears on such matters, the stronger long-term practical case they can make for excluding the nuke and for deploying alternative forms of energy. Their only hope now, I suppose, is in stiffening the spine of the localities and the county to produce new resistance – legal, social, and economic – against the reactor. Had antinuclear people in the past been more attentive to their work in their communities, their general positions in their communities, and not just antinuclear organizing, they might at least now be in a position to rally countywide support for nuclear alternatives as part of their active life in the community. To carry the message of a cause in a community when you are a generally respected neighbor is far better than when you do it as virtually your sole activity in public.

- **The politics of place is no more ineffectual than any other kind of aspirant politics.** Our friends who have ranted and raved for years about this and that being unacceptable still accept it all, as most mere mortals must from time to time. Some now bore us from within the various thises and thatses they once found so unacceptable but now find interestingly reformable. The politics of the 500-mile stare, the glazed-over insistence that having the correct line is living the correct life is still what it always was, merely correct, like rooting for the correct football team, and about as meaningful.

Maybe the politics of place won't work either. Maybe nothing works. That is one way to make up reality. Another is to go ahead and work a certain way as though it will work, or, put it this way, we have little to lose by concentrating now in an area that has

been long neglected, overlooked, even despised. What else are you doing this week?

The politics of place has one thing very much in common with any other kind of politics or, indeed, any other kind of social endeavor. It involves constituency. Put it another way. It involves making friends and envisioning neighborly relations. Conventional politics does it rhetorically, as in merchandising, using the lingo of pulling together, common causes, and enlightened self-interest. The politics of place has to do it concretely, getting neighbors interested in something, working together to do it, letting other neighbors see the work, make judgements, and perhaps join the next step, the next work.

But can anything so meager, so parochial, so local have any levering effect on the world? Who knows? But here's a possibility.

There are 3099 counties, or similar subdivisions, in the United States of America. If most of the people in all the counties started doing something differently then the country would have changed (no matter what the government, the nation, did). If people in all the counties started going into business for themselves, then productive life would change. If people in all the counties started working together in different ways then commerce would change.

Or suppose half of the counties did something. Wouldn't that make a change? Experience suggests that social change always has been (in advance of the revolutionary leaders who ride the crest of the wave, parasites on the work of other people out in the boonies) accomplished by far less a movement of people – in the places where they live.

Now imagine a quarter of the counties changing, or some lesser number, whatever strikes you as an interesting critical mass. I think of ten percent as most interesting, 300 counties.

Spread out, that's only six counties per state.

You may already have a constituency for change, or conservation, in your own county. I'm trying in mine. Okay. That's two. We have 298 to go. I know many counties where there is a substantial or at least significant constituency for the politics of place as different from the conventional politics of party. You must know a few. Our number gets more and more interesting.

Everywhere I've traveled in this country over the past ten years, I have found healthy signs of alternative or preserving communities. I know that there are such communities in at least, in at the very least six of the 55 counties of West Virginia, where I live.

These are places where people of alternative imaginations have access to their neighbors, where they can be heard. Some work on media, in radio and newspapers. Most are associated with food co-ops and such things. Most are respected in their communities as hard working, productive, skilled people. They are good neighbors, not hippie intruders, liberal weekenders, or conservative speculators. Some hold local offices.

More could. All can influence such issues as:
- preservation of farmland.
- development of local business and economy as opposed to giving away local resources to lure absentee owners.
- development of cooperative or other non-absentee, non-state forms of land, production, and resource ownership.
- development of still more experimental communities, luring like minded people.
- local development of technologies appropriate to the temper, times, and desires of neighbors and communities.
- local arrangements to adjudicate the externalities which so far have slipped almost completely into the cracks of the vast corporate state – costs of toxic waste generation and disposal, costs of subsidizing political factions and favored businesses from general funds, costs of such nation-state resource allocations as cheap water for irrigation, cheap shipping for world traders, highways, and so forth.
- definitions of progress. (So long as there is a singular definition, expressed as the national interest, by national leaders, progress will be totally manipulative managerial technique and not a process in which diversity, individual differences and, very important, individual landscapes can play any part at all. The national interest, as it has worked out in history may be seen as the narrowest interest of all, reflecting the least and not the most of the aspirations of people generally who become simply a population. Populations are hopeless masses. Settlements are human places of accomplishment.)

- Or name your own.

And, of course, that is the great point. The politics of place is the politics of your place, not mine. After you have understood and raised your own issues, after your neighbors have done the same, then and only then can we come to some sort of decent time in which our two places, and as many other places as are interested, can share, compare, cooperate.

The tactics of the politics of place may be as varied as the people and the places.

I have friends in Champaign-Urbana, Illinois, who have based their politics of place in a garage. Five or six years ago, people who had been constantly active in the politics of protest decided to settle instead into a politics of place. They organized a worker-managed auto repair shop.

When one of the mechanics ran for local office, city council, he did so as a familiar working man in the community. It was a far more solid base than a mere reputation as a political hothead would have been. He won, and has won since. His wife, meantime, has become a local tax official.

Even if they lose their offices in the one of the constant reversals of tides in American party politics, they will never be less than influential members of their community and, of course, for the mechanic he can never be less than a respected workman in the community.

They have a base. They have friends and neighbors, they have an ongoing constituency of neighborliness. And they can have some association also with students of the University of Illinois which sprawls like a parasite growth across the communities. Rather than politically highly charged students having only the dim memories of the Sixties to guide their energies, they can see a working example of a politics of place.

Incidentally, one of the most important ongoing political and social activities in the area is a small bookstore, started and operated by one man who decided, also, to stay put in the community rather than roaming the land crying doom or making dire threats. The store is a communications center, a dependable and broad interest source of books and magazines, and exactly the sort of commercial operation that fits perfectly into a politics of place.

In the Nashville area, people who used to be neighbors in Washington have also settled down, convinced of the value of a politics of place, and have organized a network of local farmer's markets which may do more to reintroduce local, small scale, nonchemical farming than any number of cult rallies or even publications

This doesn't at all mean that the cult rallies and the publications in this or any other area, are lesser activities. They are simply different activities. They produce a sonorous background. The politics of place can produce the actual melodies which people can whistle right where they are, here and now.

The **CoEvolution Quarterly** has been filled, over the years, with other examples. The Institute for Local Self-Reliance in Washington publishes an entire newsletter about such things, about the politics of place. The National Association of Neighborhoods, also in Washington, is an organizational evidence of the fact that in literally hundreds of American communities people have, with either actual municipal status or without it, banded together in substantial numbers to make purely local solutions to problems which, otherwise, would be called national and, probably, insoluble.

And, of course, everywhere the technology of place, the developments of small scale, locally feasible technologies soars along. No politics of place need be without a material base thanks to the incredibly miniaturizing characteristics of every advancing technology from amorphous semiconductors to molecular biology. These characteristics are as strikingly different from the technologies of conventional wisdom – the production lines, static development, huge tools, vast capital demands, political regulation and privilege – as the communities of a libertarian society are from the communities of a regimented society.

The politics of place does not demand but certainly does not deny the possibilities of running for local political offices. In what I believe to be the best recent philosophical statement made on local politics, Murray Bookchin has written:

"If a decentralist opposition to the state, indeed, to the regimentation and militarization of American society, is to be meaningful, the term "decentralization" itself must acquire form, structure, substance, and coherence. Words like "human scale" and "holism" become a deadening cliché when they are not grasped in terms of their full logic.

"What is the authentic locus of this project? Certainly, it is not the present-day workplace – the factory and office – which itself has become a hierarchical, technologically obsolete arena for mobilizing labor. Nor can the locus for this project be the isolated commune and cooperative, despite their invaluable features as the gymnasia for learning the arts and resolving the problems of direct action, self-management, and social interaction.

"The authentic locus is in a conflict between society and the state. And just as the centralized state today means the national state, so society today increasingly comes to mean the local community – the township, the neighborhood, and the municipality. The demand for "local control" has ceased to mean parochialism and insularity. In the force field generated by an increasingly centralized and corporatized economy, the cry for a recovery of community, autonomy, relative self-sufficiency, self-reliance, and direct democracy has become the last residue of social resistance to increasing state authority. The overwhelming emphasis the media has given to local autonomy, to a militant municipalism, as refuges for middle-class parochialism – often with racist and economically exclusionary restrictions – conceals the latent radical thrust that can give a new vitality to the towns, neighborhoods, cities and counties against the national state.

"By the same token, the municipality may easily become the point of departure for a broad-based, directly democratic, truly popular, and humanly scaled constellation of social institutions that, by their very logic, stand in sharp opposition to increasingly all-pervasive political institutions. This much is clear: the potential for a libertarian radicalism is inherent in the municipality. It forms the bedrock for direct social relations, face-to-face democracy, and the personal intervention of the individual, the neighborhood or commune and cooperative in the formation of a new public sphere. Rescued from its own political institutions such as the mayoralty structure, the civic bureaucracy, and its own organized monopoly of violence, it still preserves the historic materials for a reconstruction (and ultimately, a transcendence) of the polis, the free medieval commune, the New England town meeting system, the Parisian sections, the decentralized structure.

"Historically, the municipality itself has been a battleground between society and the state; indeed, it historically antedates the state and has been in perpetual conflict with it. It has been a battleground because the state, until comparatively recently, has never fully claimed the municipality owing to its rich social life – the family, guilds, the Ecclesia, neighborhoods, local societies, the sections, and town meetings. These richly nucleated structures, despite their own internal divisions, have been strikingly impervious to political institutionalization. Ironically, the tension between society and state on the municipal level never became the serious issue it is today because the internal forces of the town and neighborhood still possessed the material, cultural, and spiritual means to resist the invasive tendencies of political forces. Municipal life – richly textured by family networks, local

loyalties, professional organizations, popular societies, and even cafes – provided a human refuge from the homogenizing, bureaucratic forces of the state apparatus. Today, the state threatens to destroy this refuge, and municipalism has become the most significant terrain for the struggle against the state on nonpolitical grounds. The very concept of citizenship, not merely of civic autonomy, is at stake in this conflict.

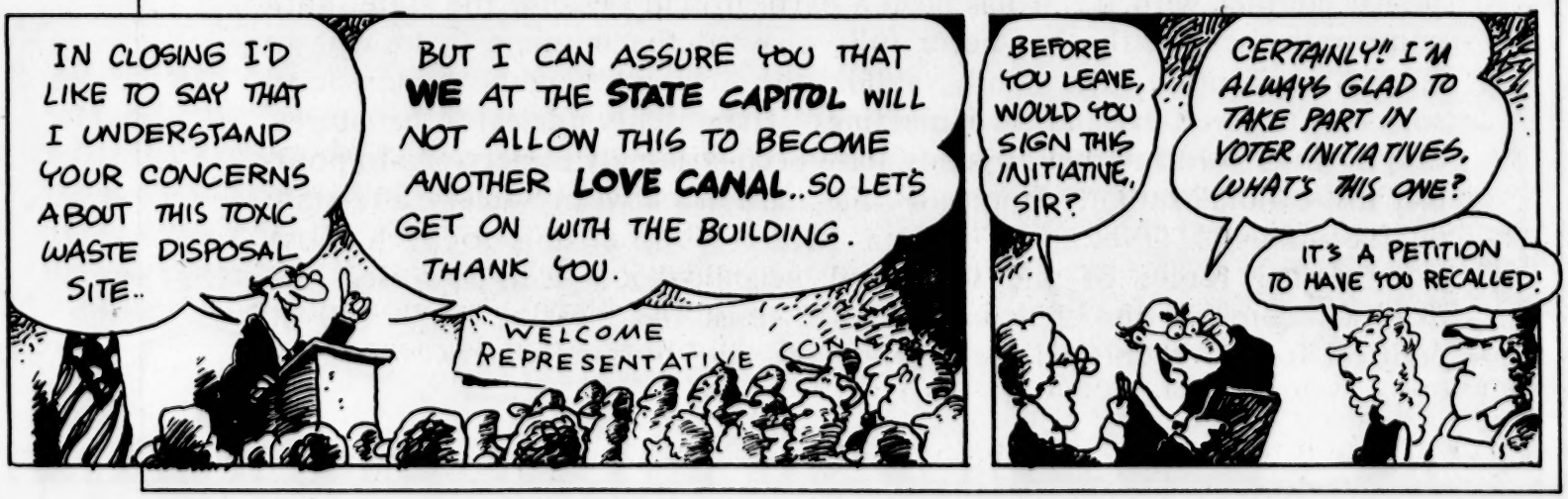
"It is crucial at this time for any movement that seeks to be socially relevant to the unique nature of the American crisis to recognize the meaning and and significance of the civic terrain – to explore, develop, and help reconstitute its social bedrock. Local politics is not foredoomed to become state politics. To help organize a neighborhood assembly, to advance its consciousness along libertarian lines, to raise demands for the recall and rotation of deputies chosen by assembly, to draw clear distinctions between policy formulation and administrative coordination, challenge civic bureaucratism in every form, to educate the community in mutual aid, finally, to foster confederal relations between assemblies within a municipality and between municipalities in open defiance of the national state – this program constitutes "politics" that, by its very logic, yields the negation of conventional politics."

I feel that there is another dimension to the politics of place that is important. The politics of party and privilege is always the politics of rights. These rights are proclaimed and enforced by agencies of brute force, the police. They may be pleasant agencies or they may be harsh, and thus mark off the cosmetic difference between autocracy and representative democracy, for instance. There remains at the heart of the thing, though, a legitimized monopoly on violence.

Conservatives, who now command our own political heights, see this use of force to maintain and enforce rights (the rights of corporate law, a public infrastructure, and police protection of titles and contracts) as virtually the whole of the civilized order. Some have even taken Ronald Reagan to mild task recently for having used excessive anti-government rhetoric that weakens the hold government has on the loyalties of people. The columnist George Will has done this at some length.

Liberals also base their politics upon the use of force to create rights (the right to make GM recall cars, the right to take money from one group and transfer it to another and so forth).

It is the proclamation and enforcement of rights that is the very business of the politics of the nation and of national parties.



And, as may clearly be seen, the enforcement of one party's rights is always viewed as an assault on the other party's rights. This is correct. It is.

Now look at rights in the natural order. There are none.

You may proclaim, until you die of starvation, the right of all human beings to food but, if you do it alone in an unplanted field you will do it to no avail. What you may observe, with your last gasp, is that you were faced with a situation in which a responsibility, not a right, had appeared: the responsibility to grow food.

Any proclamation of rights is a proclamation of the need for somebody to do something or abstain from doing something. Party politics, or autocracy, is the conventional way in which it is decided exactly who will do the work or the abstaining. There is not known on the face of the Earth any right that is not so divided. No right ever proclaimed has applied to everyone in a society. (Killing is the most obvious example. The right not to be killed is one of the most ancient. Virtually every state says that its main order of business is to defend the lives of citizens. But then, alas, time after time, the state itself must kill them, in wars, in the execution of laws, in so many ways.)

The politics of place, because it is essentially neighborly, can attend to something that I consider to be considerably more satisfying as a human proposition: responsibility.

To the extent that social discussions focus on our responsibilities in the community and, inevitably, therefore, on whether we even want to be in it or not, then we can be discussing volitional commitments. To the extent that they focus on rights, we are discussing legalistic commitments which experience has shown, acquire a life of their own, and, sadly, a life that becomes superior to the lives of the people bound under them.

Conservatives regard this as the settled purpose of human settlement and they also feel that the longer such arrangements can bind people the better. They believe in single strokes of wisdom lighting the way for people forever. Many, because of this, have strong institutionally religious convictions and they are fierce constitutionalists.

Liberals regard constitutions as a way to make sure that people perpetually do what is regarded as good – regarded as good today, that is. Thus they have reduced generations of welfare clients to indolence and incompetence because, once, some people needed charity and some other people decided they should have it as a right forever. They also decided who would foot the bill.

In the politics of place, with people discussing their shared interests more face to face, and certainly more in the light of day to day observations, a strong case can be made for responsibilities and agreement rather than rights and constitutions which are as subject to interpretation as the Bible and as subject to privilege as the curia.

At any rate, you can make a local case for responsibilities, shared and volitional responsibilities, while you can never make such cases in national politics. There is no volition in the nation. The nation says you must. The neighborhood says you should, and the good neighbor says either okay or here's why I won't – and the discussion can proceed from there.

It must remain impossible to write normatively about what the politics of place would look like close up. It would look, in fact, like any damn thing that local folks could contrive. In one county or community it could mean a drive toward a virtual free port live-and-let-live arrangement with only tiny agreements to, say, not shit on the street, aggressively kill, or steal. In others it could mean a prim approach to religious observances, tidy dress, and quiet manners. It could mean anything. It could mean keeping some town, county, or community exactly the way it is.

Whatever it meant it would have little pernicious impact on other communities so

long as the focus was inward, toward local affairs. As the focus shifts outward there are other possibilities.

A community can choose to be aggressive, trying to annex a neighboring community, for instance. Nothing new there. It is done everyday. But, in the politics of party, the target community has little leverage because the annexing community, characteristically has, because of its size, more clout with the politics of party in the area. In the politics of place, people could encourage themselves to be more stubborn about resisting such aggression, and aggressive communities, to the extent that the politics of place weakens the politics of power and party, would have less and less force to throw against the target community.

In some sweet by and by when local liberty has been achieved, of course, you might still worry that one community would go berserk and raid a neighboring one. It certainly could happen. It also would certainly be more desirable than having a nation-state do it either to the same community or to another nation-state – the difference between a brawl and a battlefield.

In most times the first response of an outward look from one community to another has been reasonably prudent: commerce.

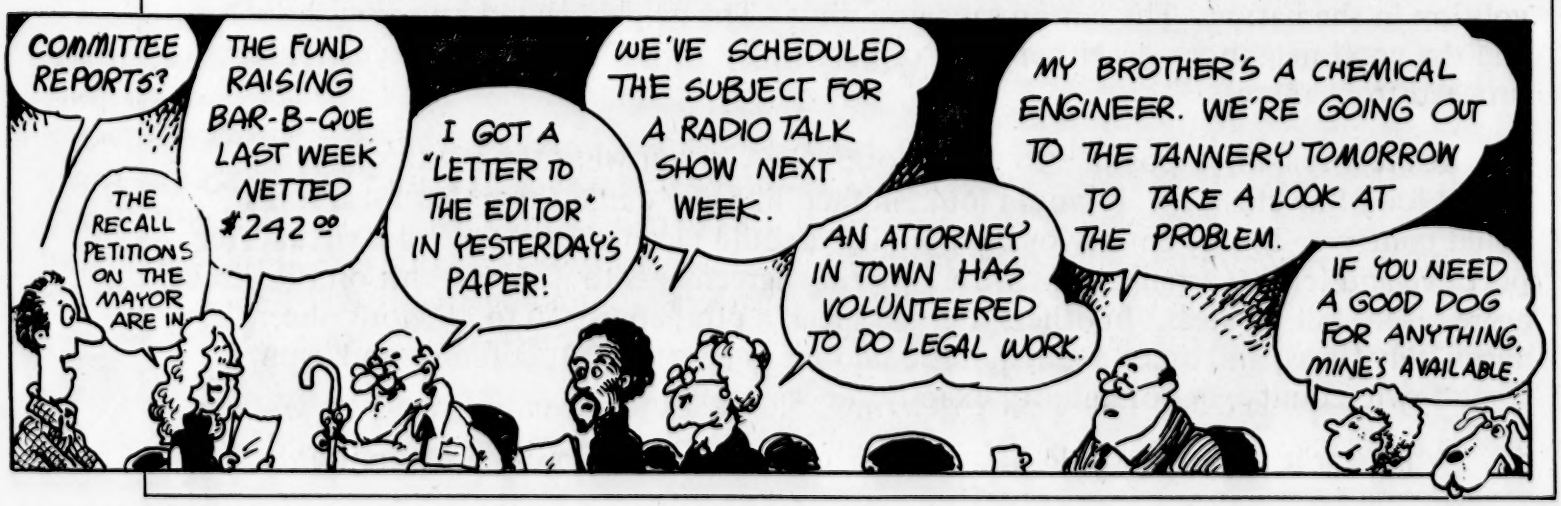
But, actually, most such concerns for what if this and what if that are fairly silly. We live in a place already. That place is in a region. The region is in a nation and it, in turn, is on this planet.

By turning away from national politics toward local politics we are not risking the sorts of spasm changes which have made such travesties of the hopes of modern revolutionary idealists who begin the morning as sweet liberators and end in the evening as common butchers.

Such a turning is to do what the Industrial Workers of the World once urged its members to do: to make the new world in the shell of the old. A better place, I believe, than to try to make it either on the scaffold or in the dreamy midair of theoretical proclamation.

You do live in a place today. You do have neighbors. You do have ways formal and informal to talk to people about change or preservation.

Local office holding is just one way. The myriad boards, clubs, and associations of town and country, of city and county, are another way. Civic associations and their constant communicative activity, offer another path. Churches are ways. Bull sessions. Food and other co-ops. Programs at the local library. Letters to the local paper. Programs on the local radio. Membership in the volunteer fire department, the police reserve. Visiting, visiting, and more visiting. Gaining respect in the community. Being serious about what you do. Speaking plainly and simply. Understanding that you have neighbors, not subjects. Staying put. Forming little groups to do little things. Teaching courses in the adult education program. Starting a women's shelter. Working with kids.



Being pleasant. Being stubborn when your neighbors can understand why. Not following leaders and watching the parking meters.

And, always, offering sensible alternatives and not just criticism. If you feel that the trash can be collected better by a private company, or a co-op, than by city workers, go into business and not just into a rage. If you don't believe in public schools, start a private one. If you don't anything, do something else. If you resent land speculation, join with your neighbors in land ownership. If you pity the hungry, feed them.

Where else but at the local level, where you are protected by the volitional agreements of your neighbors, could you expect to do anything opposed to conventional power. (The small California towns whose citizens protect their dope-growing neighbors are an example of a free market springing up where the state says it shouldn't and although I am, personally, without any enthusiasm for marijuana, I am enormously enthusiastic about the liberty and neighborliness which can shelter its growing locally rather than handing it over totally to the managerial chieftains of hierarchically organized crime. Nonetheless, that homely example shows just how far the politics of place can go even these days and against great state power. I hope more ordinarily productive examples will come to mind and to pass.)

The urge to save the world, in a piece and at once, will endure in many hearts no matter what. Suggestions regarding the politics of place can scarcely diminish that fervor. The urge to sieze power will endure. The urge to be President, or Senator, or something, will endure. I don't suggest it won't and I won't even say it shouldn't. I can't, as a matter of fact, imagine what the loftily ambitious would do if they didn't have their high offices to seek and their parades to plan. So they will.

There are many, many times more of us who aren't in that league. We march to a different drummer, as one of our neighbors once put it. Where we live is such an obvious place to get on with our parade.

What have we got to lose? We are on the scene anyway. We never live in the entire world, although we may bother about it a lot. We live at home. Charity begins there, remember? So does everything else including the next batch of human beings. Even if our inclinations keep us turned to the world, shouldn't we do at least a little work at home? Being an extremist I argue that we should do most of it there. But, being an anarchist, I would argue that you have to figure out some ratio for yourself. If you would simply grant me the same responsibility without imposing a right to make me do otherwise, I would be pleased – and we can get on with our separate politics of place, mine being Berkeley County, West Virginia, and someone else's being the universe or some other place.

While some folks are trying to save THE children, it does little harm and, I think, a great deal of good for some of us to save A child. Some people may feel the same way about whales.

And so it can go for the entire range of human action and interest. Things can be done locally. Not everything. Some things. Can any more inspiring claim be made for parliaments? And do you now care to wait for parliaments to do whatever it is they do?

The politics of place, as it has turned out, is the place for me. I have tried to save the world by being at the peak of its political power, or very near it. I wasn't very good at it, but, as I see it now, neither were the others who were working at it. I have tried to save the world by crying wolf and by crying love and by crying stranger things. I think I changed much more than the world but, then, I must keep reminding myself that I am part of the world and if I never changed then the world couldn't either, not altogether.

I have advanced and I have retreated, mumbled, shouted, even prayed. I've watched people shooting and looting. I've been high and I've been low, dirty and clean, wild-eyed

and wonderful, neat, natty, big and little, global and local. I like local best. I've had fans, followers, suitors, pleaders, bosses, and neighbors. I like neighbors best.

It comes to that, doesn't it?

I really don't have THE ANSWER. I've never met anyone who did. Maybe it's there. I never stop listening. In the meantime, though, I hate to do nothing. So I do something. I do it at home, with my neighbors. I've worked with them in an alternative technology group that has been meeting once a month for four years. Local officials now ask our advice. I've done work with our local library. Therese does more. We've held film festivals that got across ideas it would have been hard to put in a letter to the editor (which I also write at the drop of an issue). I've spoken to and made friends in just about every civic club. A couple of us are joining the Moose which, one layer under the drinking, is a mutual aid society. Friends in the next county have a movie theater. That's interesting. Friends do a lot of farming, a lot of building. We've got a fairly steady stream of courses going at the local vo-tech center, in other schools. We helped put together a medical self-care course at a local clinic. We're part of this community. We respect it. We're getting its respect. We're all likely to change some in the process.

And what else can I do? Whenever I think of an answer, I do that too. But I'm mostly at home and I like it best there and it's where I see the world from. And so I have volunteered to work at the politics of place. There may not be any more than that to it. We'll just have to wait and see. ■

There's a networking aspect to the politics of place that I'd like to ask comments on.

We are now trying to get at least one person in each of our 55 counties, here in West Virgina, to agree to be a general contact. The person will have to be the sort (you know the very kind) who may not know everything but probably does know people who have bits and pieces of it. When we have the 55 names, we'll publish them as broadly as possible; leaflets for stores and other places, stories in the papers, just passing along to friends. The idea is that if you want to know who you can contact in such-and-such county about this or that, you'll at least have a place to start. You can phone, but not collect. Or you can write, with a postcard enclosed for a short answer. We don't expect the volunteers in the net to have to go to elaborate lengths, but just to supply seed info, do pass-alongs, and make contacts.

If you wanted to check to get an idea of any particular activity on a statewide basis (are there food co-ops everywhere, for instance) it would take just a 55-piece mailing to get the survey off and running.

Now suppose every state had such a net, a contact in every one of the 3000 counties who is the sort of person interested in journals like this and suggestions like this. At least you'd have a name, everywhere in the country, where you could get a start toward finding out something, finding someone. It might be too much load for the volunteers, of course. But, rather than abandon the net, they could contemplate sharing the chores, and it could be that evidence of a big demand would inspire more to want to help. Or the net could start charging a fee. Many, many variations. But one big question. What do you think of the idea?

—K.H.

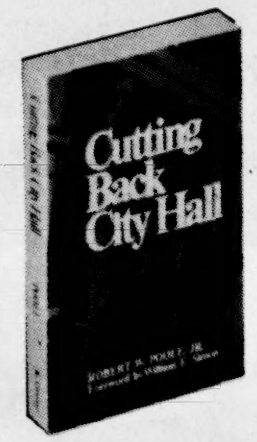
Cutting Back City Hall

The tax revolt comes home to roost.

I don't know about your town, but my city government is fat, grossly overfunded. As a result it is arrogant, unresponsive, greedy, and stupid. It has no reason to be clever or careful, and the citizens feel no reason to be involved at all, and the situation exacerbates itself.

This sound little volume can equip any citizen's group to reverse the whole process, make local government lean and responsive and citizens alert and innovative. —*SB*

Cutting Back City Hall
Robert W. Poole, Jr.
1980; 224 pp.
$6.95 postpaid from:
Universe Books
381 Park Avenue South
New York, NY 10016
or Whole Earth
Household Store



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There are three principal ways of improving the efficiency of local services: (1) *privatization* — delivery of the service by more efficient private providers; (2) *user charges* — having only the users of a particular service pay for it, so that providers have to tailor the service to actual user needs instead of bureaucratic convenience; and (3) *thinking smarter* — applying analytical and businesslike methods to the production of public services.

●

Why are tennis courts, beaches, and golf courses provided "free" by the public sector but bowling alleys, movie theaters, and miniature golf provided at market prices by the private sector? *Both* sets of services are used by particular subsets of the population. There is no good reason why the general taxpayer should be taxed so as to subsidize their group. But that is precisely what happens when the former set of services is provided without charge. Even worse, these subsidies are frequently from the poor to the rich. Everyone, rich or poor, pays property taxes — the poor as a large fraction of their rent, middle-income people and the rich directly as taxes on their homes. Thus, in many cities low-income renters are paying property taxes in order that the well-to-do can have "free" tennis courts, beaches, and marinas.

It would be far more equitable to provide such services on a user-pays basis, so that only those who benefit directly end up paying. To the extent that some members of the community may be too poor to afford these charges, it is quite possible to provide free passes or other forms of explicit subsidy *only* for them. Subsidizing *everybody* because a few can't afford to pay simply doesn't make sense.

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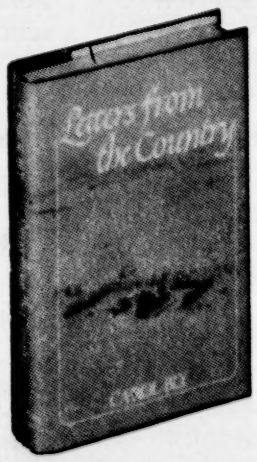
The term *jitney* refers to a small (usually 8- to 12-passenger) vehicle carrying passengers to various destinations, along a relatively fixed route, usually for a flat rate per passenger, but sometimes on a zone-rate fare. Jitneys are typically far less expensive than taxis, often costing little or nothing more than bus fare. Usually the jitney is owner-driven, though the driver may coordinate his operations with other drivers by belonging to an association. Jitneys developed in the 1914-18 period — the heyday of the Model T. In 1915 there were 62,000 of them, in every major American city. So successful were jitneys that they threatened to put the trolley lines out of business. Owners of the latter — generally well connected politically — succeeded in having laws passed in most cities completely outlawing jitneys.

Letters from the Country

First-rate wisdom about the best and worst of rural community life and how to increase the best. I can't imagine anyone in a small town reading this gently incendiary prose and leaving the school board or town council alone for a minute longer. —*SB*

Letters from the Country
Carol Bly
1981; 184 pp.
$14.45 postpaid from:
Harper and Row
Mail Order Department
10 East 53rd Street
New York, NY 10022
or Whole Earth
Household Store



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The year of Gustav Holst's centenary is a good time to quote his marvelous encouragement to music lovers: if it's worth doing, it's worth doing badly. To Holst it meant that the Lilys and Freds of the choir of Thaxted Church in Essex, England, had a right to work out the breves and semibreves in Palestrina, and sing them on the great days, why not? To me it means that every town in Minnesota that wants to ought to go ahead and have its theatre, hire a painter-in-residence, and very definitely let the B-Band trumpets screech through the Handel at Christmas.

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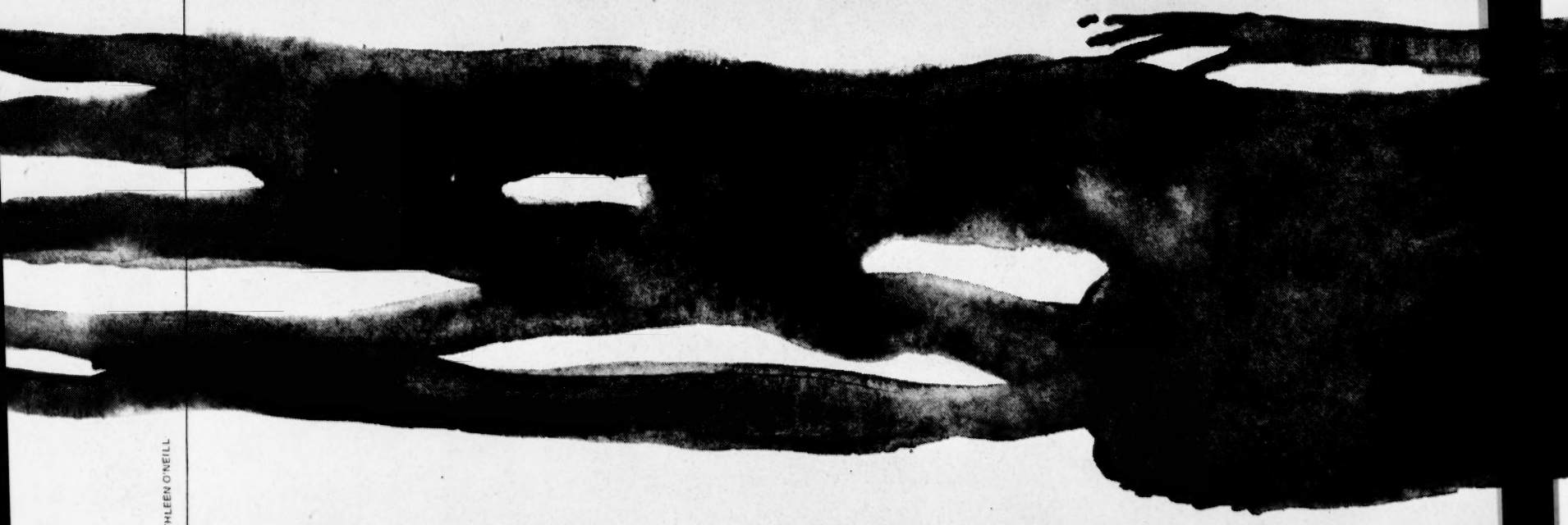
At last there is a way in which unsophisticated country people are *less* repressed than sophisticated urban people. For over a decade it has been axiomatic that educated urban elements have learned to face their feelings better than small-town people; they use available psychotherapeutic services with élan; they belong to Group, not American Lutheran Church Women's Circle; they know the right things to say — such as *we* are not always right and *they* always wrong. Their conversations are jeweled with smooth stones like "You know, when you're that angry at someone, it's usually that very thing inside yourself that you're *really* angry at." They know all about projection and association, and usually have a little repertoire of stories illustrating a colleague's lack of individuation. Yet there is one form of major repression of the 1970s to which psychological sophisticates are more subject than are Minnesota rural people: it is repression of the ancient, infinitely practical instinct to isolate ignobility from the community. . . .

In my town, at least, we are still judgmental, rigid, and punitive about bad behavior. We still do the classic American small-town process of slightly isolating anyone who is practicing selfishness at others' expense. We don't ostracize them (we haven't that luxury — sooner or later we shall have to do daily business with them: sell them things, help their kids learn layups, let them fill our teeth, as the case may be), we don't exactly drop them. We see them less.

To a therapy-oriented world this sounds provincial indeed. In fact, it is practical. Immorality is something of a contagion. If cheats and liars associate freely with those trying at some cost to themselves *not* to cheat and lie, the simple result is that the latter won't try so hard in the future.

LOCAL SHADOW GOVERNMENT

by Michael Phillips



KATHLEEN O'NEILL

A SHADOW GOVERNMENT is a group of people working together to simulate the roles of administrative managers in a real government.

For example, in Sweden the Social Democrat Party has a shadow Minister of Education who spends full time second-guessing the incumbent Minister of Education when the Social Democrats are out of office. When they regain office, she assumes the actual position she has been second-guessing. Shadow governments are commonly found in nations that have parliamentary structures with established cyclical changes in political leadership such as Sweden, Denmark, Israel, England, etc.

An important example of a shadow government is the case of Russia in 1910-1920. Leon Trotsky developed a pseudo-government for the Bolsheviks which operated for five years and was able to effectively take control of the Soviet Republics during the revolutionary anarchy that swept Russia in the First World War.

Many parts of Trotsky's structure remain to this day. The modern U.S.S.R. has a distinct form of government administration that is in direct contrast to the military-administrative structure of many countries where the revolution was led by generals.

When a shadow government is operated outside a country it is commonly called a government in exile.

Michael Phillips (author of ***The Seven Laws of Money*** *and* ***Honest Business****) has been dealing with city government in San Francisco for years. His most notable recent accomplishment is "Drunk Park," a park specially located and designed for the city's winos.* *–SB*

Local Government. Shadow government is a very effective tactic in local political processes. I learned this from my work on a blue ribbon committee to improve the San Francisco public schools many years ago. All the members of the board on this Blue Ribbon Committee went on to hold positions on the real Board of Education. Within seven years all of them had been appointed or elected to serve in positions of authority in the school system.

How and why does this work?

A SHADOW GOVERNMENT, when it is effective, is made up of people with average-or-better social skills and intelligence. The members of this group can expect to devote a reasonable amount of their time to attending public hearings of the agencies and institutions they are shadowing. These people are most effective when they play the role of "judge" in listening to policy and examining issues rather than playing the role of advocate on these same issues.

The reason shadow government

members end up assuming actual positions of power and responsibility within a very few years after beginning their shadow roles is that there is a great scarcity of experienced, competent people in political life.

When newly chosen politicians are assuming their offices they have to look for appointees. Usually such politicians are forced to choose between reappointing old hands who have experience but are not loyal or sympathetic to the new office holder and newly appointing loyal novices who are ineffective and have to learn "on the job" for quite a long time. When confronted with such choices the politician prefers a third alternative, someone who has been in a shadow government role who can be effective right away.

It is extremely common, for that reason, to appoint the chairperson of the Chamber of Commerce Transportation Committee to the Highway Commission.

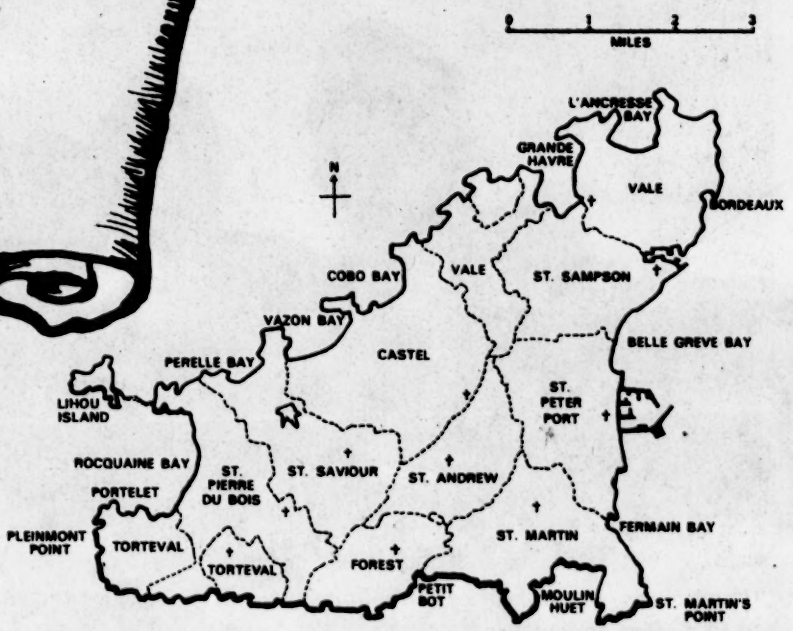
Social Change Tactic. A shadow government becomes a "tactic" of social change on the local level when a group of peers deliberately set out to work together to form a shadow government. Regardless of the reason such peers work together in common, their shadow experience in time will bring them to positions of power.

In the unique case where such people consciously work as a group on specific issues during their shadow government period, they will have more than ordinary power. They will have the opportunity to support each other's power and direct it toward common objectives that they have jointly developed.

A hypothetical example of such a process might be created in a city like Fresno, California. Suppose we find several friends who are dedicated to recycling waste products, and they get together and decide to have political impact with their values over a ten year period. Our initial group might form a "Better Government Recycling Council" and invite their friends to join as a first step. The Council meets regularly for fun events ranging from barbeques to Sunday potluck dinners. The organization has a committee structure that parallels the city government structure and the chairpersons of each committee are part of an Executive Committee that meets fairly regularly to discuss key recycling issues. Each committee soon begins to work on producing reports about recycling in their segment of government. Some committees will be very effective and competent, others will be hopeless.

The hypothetical Council we are describing will, even in the best of circumstances only be vigorous and functioning for five years, and it may never have more than 200 active members. Some of its reports will probably be used by a local grand jury on changing city policies, other reports will be implemented as policy in some agency. Most importantly, 10 to 15 committee chairpersons who were active in the Council's formative years will come to hold powerful elective and appointive positions. Such people will be active in government for several decades and work informally together as friends. They will radically improve Fresno's resource recycling systems. ■

GUERNSEY
HOW TO RUN A SENSIBLE NATION



by Robin Clarke

I HAVE ALWAYS BEEN one of those difficult people who delights in the paradox. And being as convinced as I am that nothing is ever as pure and simple as its prophets propose, I revel in finding internal contradictions in the clumps of belief to which most of us cling.

Example. You like brown rice, carrot juice, natural materials, and renewable energy. And therefore methane digestors. And therefore intensive factory farming of livestock which is the only efficient way to fill a methane digestor. No?

Which is but a preamble to the fact that I spent last Christmas on an island called Guernsey. Guernsey lies in the English Channel, much nearer the French coast than the English, supports 53,000 people, and is a triangle measuring five by five by nine miles. It is part of the British Isles but not the United Kingdom. It has its own government, makes its own laws, and raises its own taxes. Generally, it regards the United Kingdom as an unmitigated disaster and France as an unhappy accident. It has a language of its own, and nearly all its place names are in a kind of bastard French.

Guernsey has tickled my fancy because it has become something of an expert in self-sufficiency. And, like the medieval monks who first practised that gentle art, it has become exceedingly rich in the process. Yet it has nothing to do with the Brave Old World many of us took time and effort to plan in the 1960s. I doubt that Guernsey sports a single ageing hippy, a solitary commune, and there is very little sign indeed of group marriage. Indeed, Guernsey would be proud to hear me say it is one of the straightest places I have ever come across.

The fashionable drug is alcohol, which is consumed in prodigious quantities right round the clock, there being no harsh closing hours as in the UK and very little tax on any consciousness-raising beverage. The population is, well, elderly to say the least and comprises mostly Guernsey-men (women's lib not being exactly rampant in this island there is no need to say Guernsey-people or, worse, Guernseyfolk). To which, over the years, has been added a smattering of British tax exiles too rich to be able to afford the crippling British taxes. Guernsey charges a flat 20 per cent income tax, regardless of how much you earn or how you earn it. Indeed, so inviting a place has it become to those last remaining Britons with money that Guernsey has erected a monstrously unfair housing market. If you are a native you can buy your house on the local market at the normal $70,000 for the standard box. However, should you wish to emigrate to Guernsey, that same box is available to you only on the open market where it will cost upwards of $250,000. Add to this the fact that Guernsey has also become a home for wizards in banking, insurance, and other high financial swindles, and what do you have?

It was Robin Clarke who co-invented (with Peter Harper) the term "Soft Technology" back in 1969. Several books later (see his ***Building for Self-Sufficiency****, NWEC p. 176) he runs a sheep farm in Shropshire, England. This article is expanded from a column he wrote for* ***New Scientist****. —SB*

BRIAN J. GREEN

"Glasshouses" (greenhouses) on Guernsey's west coast give the island a self-sufficient agriculture.

A recipe for disaster?

So you might think. But you would be wrong. Guernsey has much to teach us, whether we are a President of the U.S. in a time of economic gloom or a rural commune seeking peace and love in the rural backwoods. Where Guernsey triumphs is in the exercise of common sense.

Take the roads. An American citizen might well say there aren't any. In fact the island is criss-crossed with country lanes, down which it is just possible to squeeze two vehicles side by side. There are no sign posts, and the possibilities for the stranger to become lost are entirely endless, which is somewhat surprising as the whole place is not much bigger than a couple of very large airports. There is one round-about and six sets of traffic lights. Now most of the locals own a vehicle, and most of the 350,000 tourists who go there every summer take at least one per family.

There is a 35 mph speed limit throughout the island which is meticulously observed. Not, I should say, enforced, because the six law enforcement officers with special responsibilities for traffic are hardly ever to be seen. But if all this conjures up visions of downtown Los Angeles or similar nightmares, forget it. To be sure, every couple of hundred yards there is a road intersection. At all of which you must obey the local code of "filter in turn." Which means that vehicles coming from different directions must go alternately. There is no other form of traffic control. There are few queues and hardly any accidents.

So roads and road safety are one item wiped clean off the slate of the Guernsey economy. The only cost is maintaining some semblance of tarmac on the most used stretches. And the road casualty department of the hospital – if indeed there is one – is not exactly over-stretched.

The same philosophy extends off the road. Petrol stations, for instance, are hardly recognizable to the modern westerner. There are no huge overhead canopies, no self-service pumps. Just a pair of pumps located right on the road edge at convenient places. Remember when smiling garage attendants used to fill your tank and then wipe your windscreen clean? Well, they don't do that in Guernsey because no one goes fast enough to throw up any mud. But if they did, they would.

I was silly enough to ask a couple of locals why they didn't modernize their garages. What for, they said. They work well enough. You want petrol, you can get it. Why spend more money on it?

ANOTHER STRANGE thing about Guernsey is its system of government. The fact that such a small place has its own would, you might think, be enough. But no. Decentralization is carried much, much further. The island is divided into ten parishes, and each parish runs a great deal of its own affairs, including its schools. And at night much of Guernsey is a dark place indeed because many of the parishes have long since decided that street lighting is a waste of money. So there isn't any. Guernseymen argue that if you go out at night and want to see, you carry a torch. Which is of course a very practical and exceedingly cheap solution.

Guernsey also has its own particular way of administering the law, though by and large the community has devised its own rules of conduct to prevent legal issues ever becoming paramount. For example, laws are meant to protect the individual, but so confused, complicated, and corrupted have they become in many societies that justice is denied those not wealthy enough for costly legal action. In Guernsey the ancient feudal law of Normandy known as the Clameur de Haro still prevails and enables anyone to protect his own property. If there is an infringement the individual can ask for immediate justice by invoking the Clameur de Haro. This he does by kneeling down in front of two witnesses, saying "*Haro, Haro, Haro a l'aide mon prince. On me fait tort*," followed by the Lord's prayer in French. Immediately the accused must stop what he is doing and the Royal Court deals with the case. The Clameur was last used a month ago by a man suffering from paint fumes from

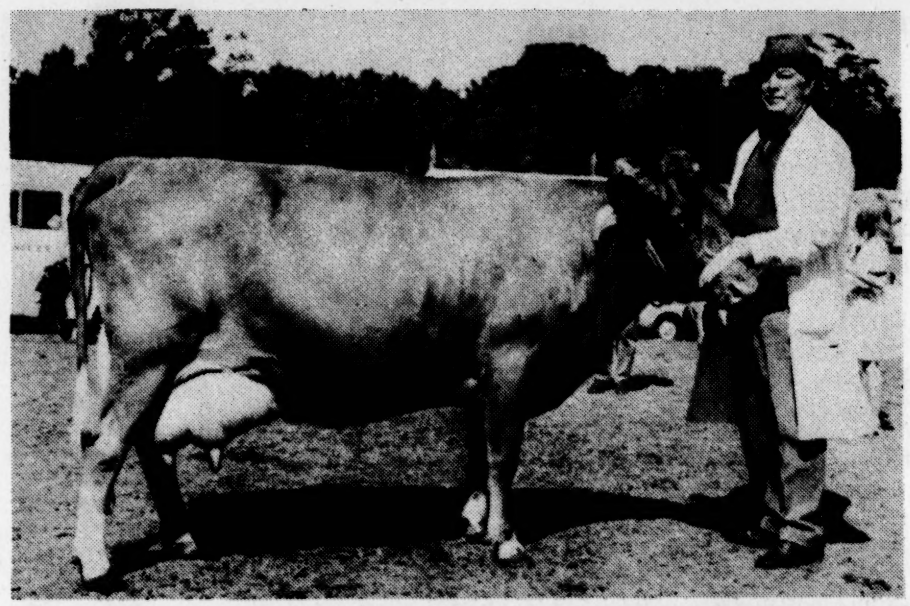
a neighbour illegally using his workshop to spray vehicles.

But the way the island runs its economy has to be seen to be believed.

"State's income last year was even better than expected, with just over one million pounds more than estimated flowing into the public purse. Year-end figures put the island's general revenue at an actual 36,435,000 pounds against revised estimates (themselves higher than preliminary estimates) of 35,627,000 pounds. This net increase of 808,000 pounds plus a 201,000 pound expenditure shortfall combined to give the island a balance that was 1,009,000 pounds more than expected."

I quote from the Guernsey Evening Press and Star of 14 March 1980. And how many western nations spent less and earned more than they forecast in the same year? And how much more have they to play with than Guernsey?

Guernsey has its own government, an equitable climate, and precious few other resources. Its government has ensured substantial income for the island with its low taxes and a pragmatic attitude to material things which they regard as inessential but are prevalent elsewhere.



BRIAN J. GREEN

Champion Guernsey cow

The rest of the income comes mainly from horticulture – the island is studded all over with glasshouses but particularly in the less cloudy north – and from tourism. The tourists are treasured but not pampered. Guernsey is studded with tiny isolated beaches which can be reached only by steep descents down cliff steps. The tarmac stays a long way away, and there are no six lane carriage ways to take you direct to the beach. You walk. And even the Tourist Board won't tell you how to get there and where the smallest beaches are. "Find them yourself," says the official brochure, tartly. Some do, some don't, and the result is that they remain small, isolated and quiet, even at the height of the tourist season.

BRIAN J. GREEN

A Guernsey beach. How to attract tourists by not catering to them.

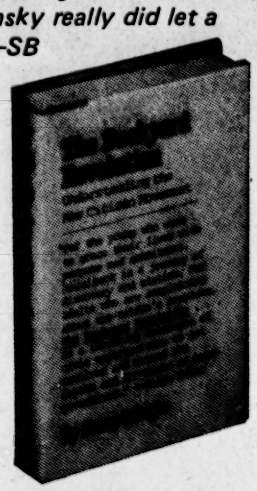
GUERNSEY ALSO sports the Guernsey cow, in some numbers. And though the UK will take all the Guernsey milk, cream, and butter it can get – the quality of Guernsey milk is higher than that provided by most milk cows – it doesn't get a lot. For Guernseymen recently erected their own State Creamery for milk processing to make sure their own inhabitants get what dairy products they want first. If there's any left over, it is exported.

In all these ways Guernsey is a highly self-sufficient place. It runs its economy in the black, and it goes from better to even better. It owes no one anything. It does better at being a western nation than almost any other. Yet it looks like something that got left in the early part of the 20th century. Can this be an accident? Or is Guernsey about the only place in the world that actually knows when to leave off?

One other thing. Guernsey is technically dependent on the United Kingdom for only one thing: defence. But then Guernsey and the other Channel Isles were the only British territory to be occupied by the Germans during World War II. Say no no more. ■

The Backyard Revolution

A good rabble-rousing treatise on the gamut of local organizing nationwide. Saul Alinsky really did let a thousand flowers bloom. —*SB*



The Backyard Revolution
Revolution
(Understanding the New Movement)
Harry C. Boyte
1980; 271 pp.

$14.95 postpaid from:
Temple University Press
Broad and Oxford Streets
Philadelphia, PA 19122
or Whole Earth Household Store

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A short resource guide to citizen organizing general citizen action

Actions and Campaigns: Community Organizing Handbook #3. The Institute, 628 Baronne, New Orleans, LA 70113, $3. The ACORN approach to choosing targets, developing allies, keeping pressure on, planning to win.

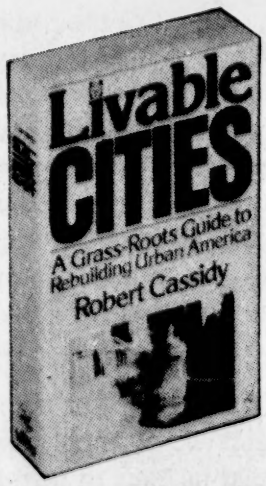
The Community Activist's Handbook: A Guide to Organizing, Financing and Publicizing Community Campaigns, by John Huenefeld (Boston: Beacon, 1974). Useful information on research, organization-building, recruitment, fundraising.

Direct Action Organizing series: I. Strategy Planning ($2.25); II. Preparing for Action ($2.25); III. Choosing a Tactic ($2.25), by Heather Booth, revised by Steve Max, Midwest Academy, 600 West Fullerton Ave., Chicago, IL 60614. The Academy approach to basic organizing questions — how to think about strategy, choose issues, considerations in planning a campaign, use of tactics.

Livable Cities

All over the U.S.A., deteriorating neighborhoods and even entire towns are being revitalized. And not necessarily by displacing the people living there either. How is this being done? By people getting together! Lots of successful war stories and the winning tactics and strategies are presented here with a voice in keeping with the subject: positive, tough, competent, and experienced. Good, hopeful reading for people who want to get control of their neighborhood's destiny. This is all easily read, too — a pleasure! —*J. Baldwin*

Livable Cities
(A Grass-Roots Guide to Rebuilding Urban America)
Robert Cassidy
1980; 340 pp.



$8.19 postpaid from:
Holt, Rinehart and Winston and Winston
383 Madison Avenue
New York, NY 10017
or Whole Earth Household Store

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The only foolproof way to prevent families from being displaced is to have them own their homes, either individually or through a neighborhood corporation. There are a number of ways this can be done. All the methods described previously in this book to help families obtain low-cost home improvement loans and mortgages — rehabilitation financing schemes, revolving loan funds, homesteading programs, sweat equity, low-down payment mortgages, rebate programs, and so on — serve to keep the original residents in their homes at prices they can afford.

Dynamics of Organizing, by Shel Trapp, National Training and Information Center, 1123 W. Washington Blvd., Chicago, IL 60607, $2. NTIC's basic approach to power organizing, tactics and strategy, coalition-building, with a passionate statement of Trapp's personal faith in grass roots democracy at the end, "The Myth of the Organizer."

Getting It All Together: The Politics of Organizational Partnership. League of Women Voters Education Fund, Publication No. 674, 1730 M Street, N.W., Washington, DC 20036, single copies 25 cents. Helpful advice on how organizations with different styles, constituencies and approaches can work together on common projects.

How People Get Power: Organizing Oppressed Communities for Action, by Si Kahn (New York: McGraw-Hill, 1970). Written for organizers, this is one of the "classics," drawn especially from the author's experiences in rural and small town communities.

Reveille for Radicals and *Rules for Radicals* (New York: Random House, 1969, 1972), by Saul Alinsky, These are the two classic works of the Alinsky organizing tradition: *Reveille* outlines Alinsky's basic method, described in chapter two of *The Backyard Revolution; Rules* develops his ideas on people's oppression by large corporations and his tactic of using proxies.

Know Your Community

Most of us pursue the obvious when we decide to participate in our community. We join existing groups, we wade into the current prominent issues. That's fine, but it may not be the most interesting or effective thing you can do. With this succinct booklet from the League of Women Voters you can quickly survey the whole range of how your community goes about its official business, and very likely you will find far more serious lapses than are being mentioned in the newspaper. —*SB*

Know Your Community
League of Women Voters
1972; 35 pp.

$1.25 postpaid from:
League of Women Voters of the United States
Publication Sales
1730 M Street NW
Washington, DC 20036

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Expenditures

1 What was the total cost of operating your local government last year? Per capita costs? How does this compare to costs of governmental units of comparable size and function within your state? What was the cost of government ten years ago? What has accounted for the change?

2 Does the state supervise or direct the spending of any local revenues? If so, how?

3 How are budgets, showing projected revenues and expenditures, and budget hearings publicized?

4 Were any expenditures made for cooperative arrangements with other local governments? regional governments?

Yes We Can!

An especially practical manual of citizen action for Canada. Most of it is applicable anywhere. —*SB*

Yes We Can!
(How to Organize Citizen Action)
Elizabeth Amer
1980; 144 pp.

$5.50 postpaid from:
Synergistics Consulting
P.O. Box 4404
Station E
Ottawa K1S 5B4
Canada

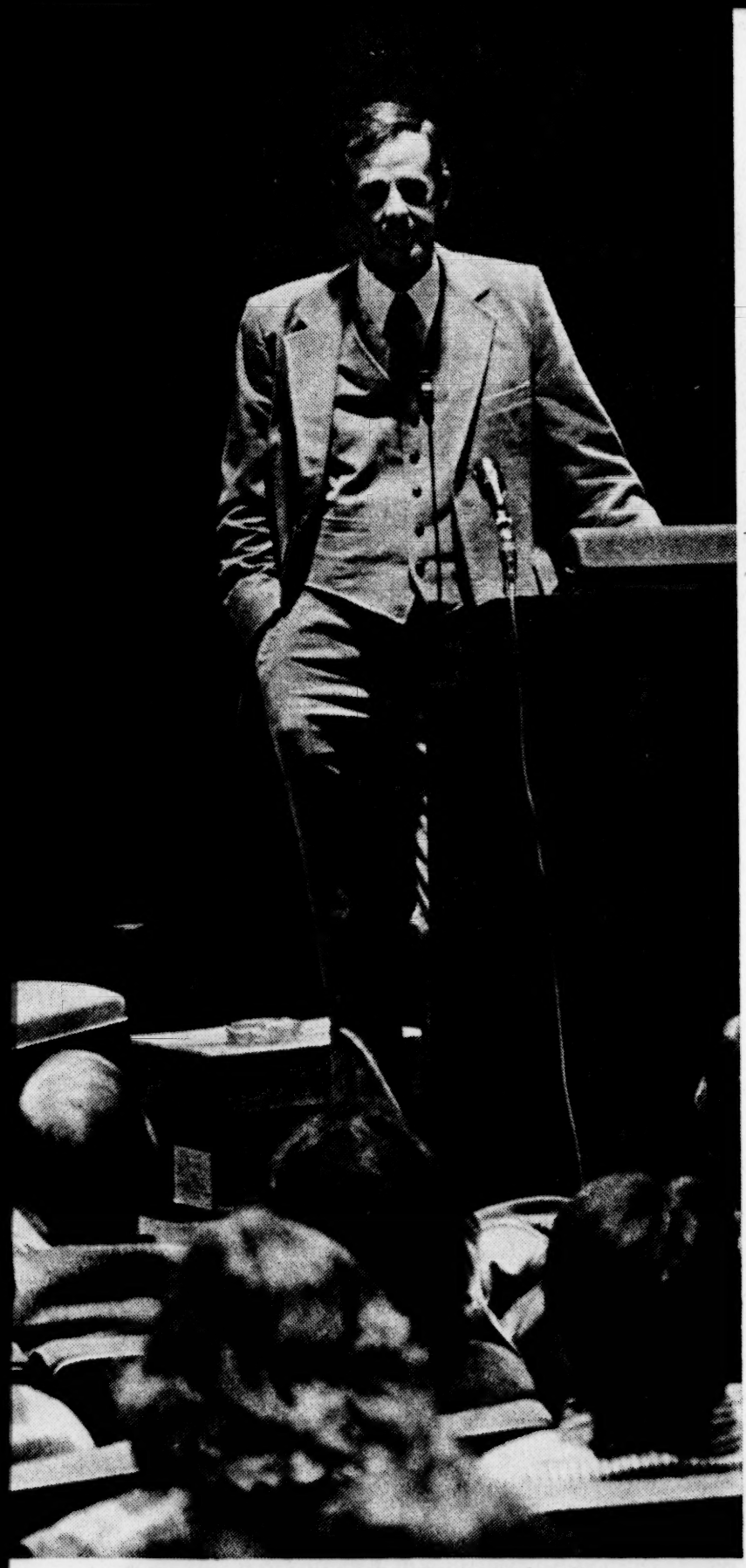
A Spawning Run Of Ecological Ideas Upstream, Against The Current

TEN MINUTES INTO THE QUESTION period, an hour after the lecture had started, a day and a half after Wendell Berry had arrived on the campus of Purdue University in West Lafayette, Indiana, after a six hour drive with his wife Tanya from their farm in Kentucky, and ten months after the negotiations had begun to invite him to give a poetry reading the day before and the talk we had just heard: "Solving for Pattern: Standards for a Durable Agriculture," someone in the audience finally got around to asking the question all of us there were waiting to hear asked, and him answer. "Mr. Berry, what you say about farming on a human scale sounds attractive. But who's going to decide who's going to starve when we cut down today's enormous productivity to start farming your way?"

The voice of the questioner was mature, masculine. The smoothness of the delivery suggested he was a member of the School of Agriculture faculty who was at ease in public, enjoying the unease this chestnut question – bright, indigestible – usually aroused. But there was no tension in the air of the audience in the pause between the end of the question and the beginning of the answer. The audience was charmed. Berry stood before us wearing a three piece brown corduroy suit that you suspected (rightly) was his only suit, a plain suit, appropriate for church and public gatherings of any kind, but at the same time you could see that it was a well cut suit, with a coordinated tie. He was comfortable wearing it. Homespun-like, tailored elegance. It was the same with his way of talking. A hill country drawl on the tongue of a smart man is a wonderful device. It gives him time to pick words carefully; what he says comes out sounding relaxed, precise and wise at the same time. Berry speaks with the pace of a farmer gazing over his land and spelling out to the hired hands what needs to be done, and in what order, to make the farm safe before the danger comes, lacing into his instructions a few wry jokes to loosen them before the effort. We had all just laughed when, in an aside, Berry spoke of losing a generation of farm boys to the cities which "radically simplify their minds," his lively small head at the top of a very lanky frame bobbing alertly like a squirrel balanced in a sapling. The atmosphere he had established in the room rubbed the productivity question warm, making it seem to sound like a standard maneuver an opponent would offer to a world chess master – in order to see, even to enjoy, how he would go about turning it to his advantage.

Berry began by acknowledging the obviousness of the question. But he pointed out the irony of our cheap wheat imports to Peru forcing their native wheat farmers to turn to raising barley that their breweries made into more beer than the country could drink. Maybe some people would be better off less dependent on our enormous farm productivity. Briefly he answered the question directly: "A few powerful people will always decide who'll starve in scarcity and who will not." He went on

An unusually self-explanatory article with two good political rules hidden in it. One is two words long, the other is three. –SB



NATALIE LEIMKUHLER

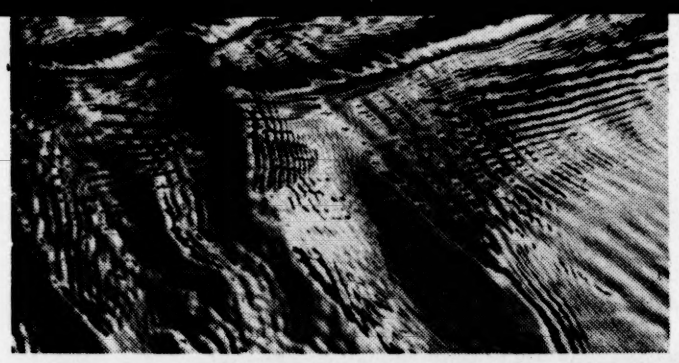
Wendell Berry speaking at Purdue University.

to make some points of his own. "I've seen figures," he said, "which suggest intensive organic farming is less productive but not much less productive, than industrial-chemical farming. Often today organic farming is the only way to revitalize land conventional farming has run out. The question should be," he added, "do we want to feed an enormous amount of people as we do now for a little while longer until our fossil fuels run out and our top soil runs to the sea, or do we want to feed as many people as we can forever on farms which can renew their own fertility?"

There was a call for a final question. It came as a manifesto from a fellow with a beard: "Didn't there seem to be a solution in getting people to eat grains directly, instead of running them through livestock?" Berry, who's written a poem about butchering hogs, was respectfully affirmative, but careful not to lose the meat-eaters in the audience by espousing vegetarianism. He worked his response into a finale about the gift to the land that the good farmer gives it, how the land gives him or her back satisfying labor that leaves no time for juvenile delinquency to develop, and how the Bible is right when it talks about the land as an inheritance.

The applause was immediate, solid, and lasted long enough for Berry to have to acknowledge its length with an extra, awkward, but obviously pleased and smiling nod. Sitting next to me was a neighbor who teaches sixth grade and raises organic vegetables for the local natural foods co-op. He turned and said, "Doesn't he make you feel good about yourself?"

Indeed, those of us clapping for him were also celebrating what an unusual gathering we were. There were some 175 people in an auditorium that seats 160. Berry had 'em in the aisles. We were, by rough estimate, about a quarter people interested in poetry primarily, with Mr. Berry enjoying a substantial following as a local midwestern poet writing about our land and our storms. Another quarter were earth-shoe people, still a little long of hair and eclectic of dress ten years after the end of the sixties. They buy their vegetables at the co-op. They are, according to one's point of view, the last vestiges of a waning popular movement towards ecological thinking, or the hard core vanguard. Another quarter of the audience looked to be people from the Ag school. The faculty in alpaca sports coats, knit ties and short hair, had open, cleanshaven faces; their students wore clean overalls and boots. Two came in with very serious cowboy hats. The other quarter you couldn't place together: my neighbor, some farm couples, a few local ministers and reporters. One person in a bright green and yellow shirt turned out to be a fellow board member with Berry of an organization of draft horse breeders. He had driven 100 miles to be there. Another turned out to be an agricultural economist from Colorado State who had come in the back during the final applause. He was on campus to do research for a few days, had just seen the poster announcing Berry's talk on a wall, and had hurried about in a maze of campus buildings trying to find the auditorium, because what had happened was worth participating in even for a minute, just as an historical event. Wendell Berry had delivered a serious paper critically questioning the industrial methods of modern American agriculture, and he had done this at the invitation of Purdue University which had pioneered the technology of those methods under the direction of Earl L. Butz, past dean of



the Purdue School of Agriculture, and of course, past Secretary of Agriculture under Nixon and Ford. This is the same Butz that Berry had criticized closely and passionately in his book-length diatribe against industrial farming, **The Unsettling of America** (**NWEC** p. 46). Earl Butz wasn't in the audience this day. But his presence looms over any mention of agriculture at Purdue as a mountain over the river that carries away its runoff. Berry had been bucking the current with every flourish of phrase. The bipartisan applause at the end said he had made it to the headwaters intact.

As the applause subsided, I wondered about the power of even his words to change minds. I glanced at the Ag school faculty greeting each other across the rows of seats as they struggled into their coats, their smiling faces as inscrutable to me as the Buddha's. What did they think? I recalled that earlier in his talk Berry had said that he changed his thinking about farming when he came into some bad land – corned-out, run-down hilly ground conventional farming couldn't revive. His ideas now are what his fields taught him. Earlier in the afternoon, over a cup of coffee, he and his wife Tanya had engaged for a minute in what seemed to be a long standing playful disagreement about what it takes for people to change their minds. Tanya thought an observant eye was enough; Wendell, a disciplined mind. It occurs to me now, however, that what neither Berry had talked about was what was at large in this room: the age-old energy of edification – the power of a good example. The sheer presence a person commands recommends what the person says, however odd it sounds at first. And Berry, standing now on the stage at the end of his talk, talking to people who had pressed up close to him, including some faculty from the Ag school, he as trim and proper as Gary Cooper at the end of **High Noon**, probably hadn't convinced anyone in the audience not already convinced about what he had to say, but among even the skeptics he had established for the first time perhaps the credibility of his ideas about farming, publicly, on the strength of his forthright, brainy wit, delivered in a modulated but authentic slow Kentucky drawl. Why, by God, a Lincoln could almost convince the South.

There's a lesson in this for those despairing of their ecological ideas ever getting a hearing. Be true.

There's another lesson that can be told by going through the particulars of how it came to pass that the Purdue School of Agriculture agreed to invite Wendell Berry to the campus in the first place. If we can't see ideas changing minds, we can often see their amazing feats of resourcefulness in getting around, even against the current.

It was extraordinary that Berry's ideas came to Purdue not only because Earl Butz's portrait hangs in the main staircase of the Ag Administration building (AGAD for short); but because in the abstract, on paper they seem not only silly but hypocritical to the academics of agriculture, by this line of reasoning: we all need to eat; there's an enormous number of people in the world, many of them interested in civilized pursuits other than farming (Berry supplements his farm income with writing and editing); we call on farmers to grow a lot more food than the farmer's family needs to eat, pressing problems of productivity on the farmer that until recently only industrial farming techniques have been able to solve. So of course everyone associated with modern industrial farming is going to resent criticism when they think profound gratitude is really their due. The farmers actually working the land are often going to have their resentment compounded by guilt, because they know what intensive cropping year after year does to the soil, and they don't really like working around miserably crowded animals, things they have to do to make the profits their debts require. You had better be careful with what you say around them, especially if you have soft hands. On top of all this, manufacturing firms with enormous prestige and capital have vested interests in supplying the massive demands of our massive industrial agriculture. They like things getting bigger. The question now is, how did Wendell Berry, a poet and farmer who plows with horses, manage to get his foot in the gate of this incredible barnyard?

He spoke in December. The previous February I was teaching his **Unsettling of America** in an English course at Purdue entitled The Literature of Ecology, which reads books by Thoreau, Muir, Annie Dillard, Robinson Jeffers, John McPhee and others. It's the kind of literature course that's been designed to lure back the students who, in the last decade, have drifted away from the humanities and into practically minded courses in business and technology.

I inherited this course from a poet, Lee Perron, who developed it eight years ago while teaching at Purdue, often barefoot, before moving on to California. He offered me the course, and when I resisted, he pressed a copy of Aldo Leopold's **Sand County Almanac** (**NWEC**, p. 46) into my hands to show me the kind of literature he was talking about. I got hooked, it seems, for good.

Now you might say that Lee's persistence edified me, and led to everything else that follows in this account. But you could just as easily imagine that a school of ideas has been using both of us, riding on our backs, tugging on our earlobes like reins, directing us to advance their cause, to deliver them to the headwaters.

One day while I was teaching Berry's book, the idea came to me how much fun it would be to hear Butz's side of the argument tested against Berry's in the open. Bringing their views into confrontation wasn't unprecedented in these parts. A debate between Berry and Butz had taken place at Marshall College in Indiana in 1977 with some of its highlights published in **CoEvolution Quarterly** (Spring 1978). So I wrote Berry a letter. He wrote back saying that he was trying to cut back on his public appearances in order to spend his time writing and farming, but he might be interested in having a discussion with research scientists and students in the School of Agriculture about his book, if it wouldn't be billed as or seem likely to degenerate into a "shootout, which would be useless."

I hadn't any notion what to do next. After teaching English for seven years at Purdue, I had, I admit to my shame, never once set foot in a single building of the Agricultural complex. And it seemed someone with authority over there would have to be contacted and persuaded to agree to have Berry come, officially, even to pay for some of it, so there wouldn't be the slightest suggestion that a bunch of organic freaks were attempting an end run. After talking with some of my students, I wrote a letter to a popular teacher and a bare acquaintance I had in the Forestry Department asking advice about whom I should contact. A month went by before a cautious note came back saying he didn't know how he could help, but he had passed my letter on to one of the associate deans of the school. I waited another couple of weeks for the dean to reply, then sent him a letter spelling out my idea more formally. After another three weeks went by I figured I wasn't going to get an answer. The silence seemed ominous; it sapped whatever courage I might have wanted to muster to call one of these people on the phone. The term ended. I was torn between writing Berry that the deal was off, and waiting to see if anything magically would materialize: a late night phone call: "Say, excuse me for ah getting back to you so late, but this is the dean, and this Berry idea sounds great. . . ."

During the summer a new administration took over the School of Agriculture. It seemed, in the fall, worth another try. This time I took a breath, and called the new head dean's office to get a personal appointment, without saying ahead of time why I was coming. I brought along a copy of the Butz-Berry debate, several books of Berry's poetry and **The Unsettling of America**. Above the portal of the building I entered was a single, emphatic statement chiselled in stone: "Erected in 1916," as if that said everything that was needed to be said.

Immediately inside the portal was a staircase you mounted to face two massive oak doors twelve feet high, with a sign off to the side saying this was the entrance into the Dean's Office. Inside, the secretary's desk sat right in the middle of the room, with a large empty space between the door and the edge of her desk that you had to cross under her careful scrutiny. After I gave my name she motioned me towards the only empty seats — hard backed chairs set against the side wall — while she buzzed my presence.

The dean came out with a real smile to usher me in, and motioned me in, and motioned me to a comfortable chair across from his huge desk. I sat on its edge, working at looking comfortable while he smiled again in a friendly way and asked what I wanted. What came out of my mouth was a slew of run-on sentences while I waved the Berry books around. I said I wanted to be clear from the beginning that Berry had written very critically of Earl Butz, but that they had once agreed to debate one another, and that I thought it would be wonderful to have him here to talk about his ideas because he was the most eloquent proponent of a new kind of agriculture that really was very traditional and what an interesting thing it would be if the English Department and the Ag School cosponsored a visit from a man who was both a poet and a farmer. . . . When I stopped, the dean was still smiling in a friendly way (he reminded me of my uncle), and after he asked me some questions, amazingly he said, "I don't see why not." Immediately I blurted out, "Why that's great!" and started to gush gratitude and pleasure, while inwardly congratulating myself for finally pulling this thing off. Even while I was still talking, though, I saw the deans's face clouding over as if the shade of ex-dean Butz was drifting before it, and inside my brain a voice started shouting, "Get out of here before he changes his mind! Shake his hand and leave!" But before I could, he changed

his mind. "Well," he said, "maybe on second thought, it would be better if I consulted with some of my colleagues and got back to you on this this." "All right," I said, and walked out and started kicking myself in the ankles as soon as I shut the door on the secretary's cool regard.

Two weeks went by. I called the dean, who couldn't be reached. Later his secretary called me and said that the materials I had left with the dean had been passed on to an associate dean. I waited several weeks and finally got that dean on the phone.

He asked me simply why I thought the School of Agriculture should sponsor Wendell Berry; I thought to myself, "I'm finally on the line. This is the first time I've ever been asked to defend my sense of ecology and what it means to the health of the world in general and Indiana farm land in particular." I knew as I started speaking that I had to make Berry sound good in my own words, not his own oh so much better ones, and I wished I had notes, polished phrases worked out ahead of time. Instead I had to improvise for maybe three minutes, until, at a pause, the dean brought me up short. He said, "We can't afford to leave our students alone with ideas like that." He no doubt meant my ideas; but I was thinking wildly to myself that Berry could say it better if only I could get him here. My desperation pushed me into saying something that finally did make sense, at least to me. I said, "That's just the point. Your students aren't going to be left alone with his ideas – you'll be there, other faculty will be there. And instead of their coming across these ideas on their own, as they are bound to, your students will confront them where they can hear them talked about, critically and intelligently." Well, he said, he'd let me know.

Two more weeks went by. I figured it was the brushoff again, and so angry in my mind, but polite enough on paper, I dropped the dean a note asking him to please send back my Berry books. He did promptly, and in the packet included a flyer for a talk being given on campus the next week by one of their own faculty on pesticides in the environment. In a moment of rare inspiration, I called the dean on the phone to thank him for sending the books back and told him I had been planning to go to the talk before he had sent the flyer (and I had), and that I would surely be there. He said good, he'd like to see me.

We met in the foyer of the same auditorium Berry would speak in two months later. The dean was handing out flyers and talking to people he knew. As I walked past I recognized the sound of his voice and introduced myself. We shook hands, chatted pleasantly, and as I finally turned to start walking into the auditorium I heard him behind me say, "Oh, by the way, we've got to get together to figure out how much of an honorarium to pay your Mr. Berry," as if this was some unpleasant detail that I had been putting off during the press of the semester. I was stunned. When I turned around with my mouth open he smiled and said, "Call my secretary."

As I walked towards my seat, I kept wondering had everything that happened dealing with these people been a test? Is it that because these deans and I come from such different worlds and speak such different languages, that we're like two different tribes, signalling our benign intents with gestures across a waterhole? Whatever. I decided that the lesson in this for anyone peddling ecological ideas is: keep showing up. ■

Local social work

Just read the articles on Hoedads in the NWEC (p. 85). Pretty inspiring in a lot of ways – anything people can make a living at should be adaptable to a similar enterprise. Their story reminded me of something I was thinking about last fall, which may be worth sharing.

My practice of social work has seemed much more effective because of working in my home community, a rural county in the Appalachian foothills of Ohio. Mutual acceptance, understanding, and access to natural helping systems, which a transplanted worker spends months developing, have come readily. It occurred to me that, instead of shackling ourselves into unwieldy bureaucratic berths, social workers could form collectives, serving the neighborhoods where they live. Size of the group would depend on affinity and geographical availability. Jurisdictional lines could be ignored most of the time. We would do our thing in people's houses instead of some sterile office somewhere. (What a fantastic check on professional hubris – much harder to play God with the guy you live next door to.) Payment could be made in barter of goods and services when feasible; we would accept help as readily as give it. In starting out, each collective would probably make its bread and butter from contracts with existing agencies, for "in-home services," working with "troubled youth" (nobody else wants 'em), and so forth. Once the word gets out and people start coming to the weirdos first, the sky's the limit – what's your neighborhood need? . . .

Bruce R. Arnold
Morganstown, WV

Labor movement

I was glad to see that both the left and the libertarians were given space in the **Next Whole Earth Catalog** *(pp. 390-393). For all their shortcomings both groups represent part of the solution to our current problems. However, I was appalled by the lack of any mention of the labor movement (except for Fraser, Winpisinger, and the Wobblies).*

The bureaucratic (and often corrupt) top labor leaders do not offer much hope for change. However, labor militancy has never completely died. Rank-and-file caucuses are proliferating, and even winning local victories. Most people in this country are not homesteaders or small entrepreneurs. They are workers, in factories or offices, organized and unorganized. The labor movement is their main hope for gaining control of their own lives.

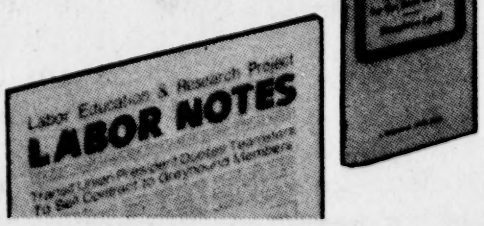
The best sources of information on grass roots labor struggles are the **Guardian** *(NWEC p. 392) and* **Labor Notes.** **LN** *is a monthly newsletter put out by the Labor Education and Research Project. No rhetoric, just information not available elsewhere. Each issue has a column listing free and inexpensive publications of interest. LERP also publishes several useful booklets.*

The ACLU has a handbook, **The Rights of Union Members** *(a member of the series reviewed on p. 293,* **NWEC***). This book only deals with a union member's right in relation to the union bureaucracy. For rights in relation to the employer,* **Labor Law for the Rank and Filer** *is recommended for both organized and unorganized workers. It is written by Staughton Lynd, a well-known labor lawyer, and is published by Singlejack Books. They also publish fiction, poetry, and memoirs by workers. —Walt Noiseux*

Labor Notes
Jim Woodward, Editor
$7.50 /year (12 issues)
from:
Labor Education and
Research Project
P.O. Box 20001
Detroit, MI 48220

Singlejack Books
Catalog
free
both from:
Singlejack Books
c/o Miles and Weir
P.O. Box 1906
San Pedro, CA 90731

Labor Law for the Rank and Filer
Staughton Lynd
1978; 64 pp.
$2.05 postpaid



●

In the private sector, when you punch in you leave your constitutional rights in the glove compartment of your car. In the private sector, you do not have a constitutional right to free speech: if your employer makes a product which is unsafe, and you "blow the whistle" on him by telling the press, you can legally be fired by him for doing it. Likewise, in the private sector, you are not innocent till proven guilty. When an employer disciplines or discharges you, you don't stay on the job until the grievance is arbitrated. Instead, you are off work and lose pay, and get the money back only if you win the grievance. **—Labor Law**

●

The Women's Labor Project has brought it all together in one 144-page book: everything a union activist could want to know about using the law and the union to fight for better conditions for women workers.

Bargaining for Equality. Written and published by the Women's Labor Project of the National Lawyers Guild, San Francisco. 144 pages, $4.50. Ten or more copies, 40% discount. Mail orders: add 50 cents postage, or $1.50 for first class. **—Labor Notes**

Occupier goes over the fence during the August, 1978 action. 487 people were arrested as they walked up the PG&E access road or blockaded the gate during the three days of protest.

Diablo Canyon Blockade Encampment Handbook ↑

Said to be the state-of-the-art of political demonstration literature, there's a lot of good technical detail here along with good connection to other movement goals besides anti-nuclear, and mercifully little rhetoric. —SB
[Suggested by Crystal]

Diablo Canyon Blockade Encampment Handbook
Handbook Collective
1980; 60 pp.

$2 postpaid from:
Diablo Project Office
452 Higuera Street
San Luis Obispo,
CA 94301
or Whole Earth
Household Store

●

An affinity group is usually composed of 5-15 people who have either been brought together at an Abalone preparation in non-violence, by being in a local anti-nuke group or other type of work, or just because they're friends. In addition, many affinity groups choose to focus around a specific interest, issue or philosophy, such as opposing sexism or racism in the anti-nuclear movement, peacekeeping, being lesbians, Dead Heads, or single mothers. Affinity groups are the basic decision-making body of the action.

Affinity groups serve as a source of support and solidarity for their members. Feelings of being isolated or alienated from the movement, the crowd, or the world in general can be alleviated through the love and trust which develops when an affinity group works, plays, relates together over a period of time. By generating familiarity and trust, the AG structure reduces the possibility of infiltration by outside provocateurs.

●

It Isn't Nice
by Malvina Reynolds

It isn't nice to block the doorway,
It isn't nice to go to jail.
There are nicer ways to do it,
But the nice ways always fail.
  chorus #1
It isn't nice, it isn't nice
You told us once, you told us twice

But if that is freedom's price,
We don't mind.

ILLUSORY

It's really deflation, and it has some surprising benefits.

by Paul Hawken

It's a measure of the times that Paul Hawken's articles about economics in ***CoEvolution*** *have become one of the most popular features in our 13-year history. His previous ruminations – "Disintermediation" in Spring '81 and "What's Economical?" in Summer '80 – still look good in retrospect. I wonder how long this one will hold up.*

As usual, there is good advice for the individual along the way in Paul's analysis. For even more specific guidance on personal economics, see "Investing Successfully When You Don't Have Much to Invest," on p. 79. I checked it with Hawken. He said print it. *–SB*

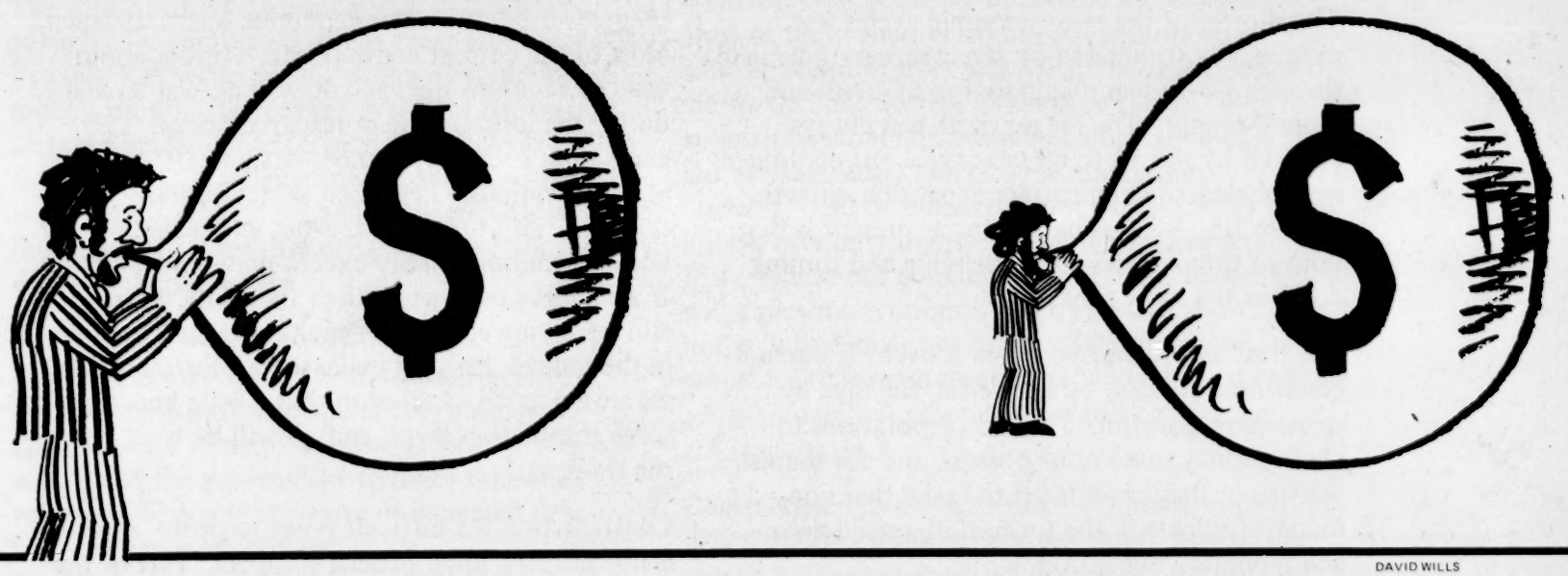
**What the market is saying is to have cash.
Be liquid. Get out of debt.
Lend if you will, but do not borrow.**

LAST ISSUE'S ADVICE to tiptoe out of real estate received both criticism and queries. Some readers wrote that I was flatly wrong and extolled the conventional wisdom that housing is the answer to inflation for the middle classes. They cited tax advantages in the high interest rates, decline in housing starts while demand increases, and other virtues. Others wrote with specific questions as to what they should do. Some agreed with me. However, the purpose of the box was not so much advisory as observatory.

At the beginning of the decade the market signals to all who will listen what is going to happen during the coming ten years. In 1960, it said buy stocks. Those who did were handsomely rewarded (if they sold before 1969). During the beginning of the seventies, the market said buy hard assets, get out of stocks, bonds, and currency. The idea of buying gold sounded primitive to the hard core middle class. Any zealot who advised such was hooted and jeered by their more sensible peers in the economic world. But hard assets – metals, real estate, diamonds, Ming ceramics – did very well indeed. Now it is the 1980s. What is the market saying?

A half-century long trend has abruptly ceased. For fifty years savers have subsidized borrowers.

INFLATION



DAVID WILLS

Comparing the rate of return between somebody who earned interest on money and the overall rate of return earned by those who bought assets with same, borrowers came out way ahead. With accelerating inflation, this advantage has widened until it is now commonly known that a 5¼% Savings and Loan (S & L) deposit is a very safe way to lose money.*

But since 1980, this has changed. Borrowers are now subsidizing savers. Interest rates available to savers have been consistently higher than the Consumer Price Index (CPI), excepting for a very brief period. Now savers can earn a premium over the rate of inflation, which means that many borrowers are or will soon be liquidating their assets to pay off their debts (most don't realize it of course).

What the market is saying is to have cash. Be liquid. Get out of debt. Lend if you will, but do not borrow. This is why the fundamentals for real estate are bad. If there is not a willing lender to subsidize the real estate market, there can hardly be willing buyers. That means price softness, the end of real estate as an inflation hedge. The cheaper dollars do not exist with which to pay off mortgages. Banks and S & L's are moving towards mortgages whose interest rates can adjust constantly over the life of the loan. If their cost of money is over 20%, your mortgage will be the same. If you buy a house now, you will be subsidizing savers for the next decade at least. Better to buy a home with cash or to rent than to buy into a lot of debt.

More important than understanding the movement of any single market like real estate is to gain a firm grasp upon the fundamentals which are acting upon all markets and economic segments. Any advice, even correct advice, is not nearly so useful as figuring out why things happen the way they do.

The shift at the beginning of this decade from savers subsidizing borrowers to borrowers subsidizing savers is a clear signal that a half a century long cycle has peaked. The long growth period commencing in 1932, which picked up impetus during the war and slowly exploded when the soldiers came back with savings and started families, culminated during the late sixties and early seventies. Furthermore, a larger 250 year cycle which I

***Gnaizda of Public Advocates of San Francisco actually sued the Treasury Department and enjoined the FCC to stop the government advertising of Savings Bonds as a means of increasing one's wealth. He won. The Treasury Department changed its ads.**

call the mass economy was also converging upon the early seventies and reached both a symbolic and actual inflection point when OPEC raised the price of oil. The fifty year cycle was fueled first by WWII, then by its technological offspring, and finally by the baby boom moving through the consumer markets (including real estate). The mass economy was empowered by the large extraction of resources from around the world, the bulk of which was processed and resold in America by Americans, making us the wealthiest country in the world.

The shorter of the two economic cycles was periodically stimulated by the creation of demand through Keynesian manipulation of credit and money supply. The longer cycle was always affected by the 50 to 60 year cycle but continued nevertheless to demonstrate expansion, growth, and wealth. What is happening at present is that both of those cycles are converging and turning down at the same time.

The post-war economic boom is over. It's actual cessation is masked by its inertia, the urge by consumers, governments, and corporations to spend money none of us possess, and the requisite activity of the government to make that non-money available in the form of increased debt and monetary expansion.

The mass economy, which began with the colonization of much of the world by western European powers and resulted in the large scale exploitation of planetary resources by industrialized countries, has reached a different inflection point – resources are no longer under colonial rule and the supply-demand ratio has shifted dramatically in favor of the supplier.

The single most important principle concerning present-day economics is expressed by the mutual convergence of these two cycles turning downwards. It is summarized and expressed by the changing relationship of values of labor (people), capital (money) and resources (energy, minerals).

Whether prices go up or down is of no importance whatsoever. Furthermore, if you look at events through the eye of a monetary instrument such as national currency, everything will be distorted, and you will not get a clear picture of what is happening. That is why it is the changing ratio of values that must be emphasized, because only in the relationship do we find information that tells what might be happening.

The basic trend in the relationship of these values going back to the early 18th century has been one where labor has gone up in value, resources have been increasingly cheap, and money more easily available (credit). The growth of money was a direct result of the prosperity gained by energy released through resource extraction. Labor went up in value as an ever growing, more complex economy demanded skills, and as the need for markets demanded a more affluent middle class. Cheap fossil fuels increased the production of goods through technology and machinery, lowered costs, fostered wealth, and provided each individual with the equivalent of 500 human slaves in caloric terms.

With the rise of oil prices in 1973 (and subsequently), the ratio of values between the three variables of labor, resources and capital was dramatically changed. The dynamics among them reversed, and a new economic was established. Most of the current conventional wisdom about what an economy does and doesn't do was amassed during the long decline in resource prices. The anomalous economic behaviour since 1973 that has been variously described as stagflation, "slowth," and turbulence, is not explicable by any known economy theory except one: contradiction. If we believe our own indices and think we are still a growing economy, much else that shows up in the indices does not make sense. Furthermore, we are led to the conclusion that a little boost here, some stimulation there, and we will be back on the track again.

Contradiction is a difficult point to prove, since it is not showing up in official statistics. Part of the reason it does not show up in government indices despite the factoring in of the CPI into inflation-adjusted figures, is because the indices and accounting methods which are agglomerated into single digit numbers about growth and change are based upon the notion that a monetary instrument does not change in value and that assets do not change in value excepting as they are depreciated from initial cost. Inflation has so suffused and warped the balance sheets of corporate America that the lack of growth is masked in fluff and buyouts. We simply do not have a balance sheet adequate to the task of telling us whether we are replenishing our assets and resources; whether our debt represents an unpayable demand upon the future; whether we are living off of principle or interest. In other words, we do not have a system which gives us the correct information (feedback) about what we are doing. Thus, it is easy to take the wrong steps based on wrong information, not only by governments, but by businesses and individuals too.

The initial effect of the OPEC oil rise was to inject a powerful inflationary element in an already inflating currency. Earlier inflation was due to government attempts to stimulate an increasingly moribund economy. On top of those futile efforts, which only served to create debt, OPEC increases were added. That further slowed down the economy, and the government threw even larger deficits at the economy in hopes of recovery. National debt ballooned, the demand for capital soared to finance the debt, and inflation took off.

THIS PAGE 32 IS A DUPLICATE OF
← THAT PAGE 32 EXCEPT THAT AN IMPORTANT TYPOGRAPHICAL ERROR HAS BEEN CORRECTED.
HEH, HEH. SORRY.

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It is critical to realize that the present monetary inflation hides asset deflation.

Thus inflation is caused by a combination of social, political, resource, and fiscal acts. Separating them confuses the issue. But while it is important to understand the dynamics of inflation, it is critical to realize that the present monetary inflation hides asset deflation. In a normal inflation, most prices rise together with the exception of articles that are perceived as being able to hold their value better than other items, and these become self-fulfilling hedges to "beat" inflation. Thus silver, gold, diamonds, antiques, and items of scarcity are highly sought in inflationary times. But rarely, if ever in the history of inflation has there been a profound deflationary force occurring simultaneously with inflation.

The price of oil became so important because oil is the bloodstream of the industrial world. Without it the industrial world ceases. And in terms of oil, the value of many of our assets have plunged. According to Scott Burns, the price of the Dow-Jones has dropped 95% in one decade if measured in barrels of oil. In other words, with 1/20 as much oil, you could buy the same stocks now as you could ten years ago. Or take real estate. Ten years ago oil sold for $1.80 a barrel; now it sells for between $32 and $40 a barrel. If your house tripled in currency value during the past ten years, you can buy the same house for only 1/6 the amount of oil now – an 85% drop in value. While currency inflation reflects the inability of the economy to grow under monetary stimulus, asset deflation in relation to critical resources points to the major cause. Our production and consumption of goods consumes too much energy to be economical.

And the combined forces of money, resources, labor, trade, and consumption are forcing us into becoming economical, whether we like it or not. One of the ways that this occurs is by impoverishment. With borrowers subsidizing savers, institutions are liquidating themselves. They are paying out more worth than they are netting, thus contracting every year. This form of contraction however, does not show up in governmental indices. The best single example of this is the savings and loan industry.

Because of high debt, we have high interest rates. Because of high interest rates, savers are shifting low-yielding funds from financial and thrift institutions. These institutions are being "disintermediated" in the original meaning of the term.

DAN WELCH

If your house tripled in currency value during the past ten years, you can buy the same house for only 1/6 the amount of oil now – an 85% drop in value.

Savers are going around them through mutual money market funds, lending directly to corporations, the government, and even banks.

In order to stop the outflow of funds, S & L's have had to institute Treasury-Bill accounts. But the rate of interest they are paying exceeds the interest they are earning on their loan and mortgage portfolio. This outflow of capital in the form of higher interest rates threatens to make hundreds if not a thousand of the savings and thrift institutions insolvent before long. According to the **Wall Street Journal**, 400 thrift institutions have a net worth of less than 4% of their liabilities. If their loan portfolio is earning 8% and their cost of funds is 10%, they have less than 24 months before they are insolvent. But this does not tell the whole picture. Remember that a savings institution's liability is what it owes the saver and depositor. Its assets are the mortgages which show that someone owes them principal and interest. At present the $800 billion worth of mortgages held by these institutions is worth only $550 billion – the price that these mortgages could command on the open market if they were to be sold (they would have to be sold if an institution were to become insolvent). The difference in face value and

market value is the proportional difference between what the mortgage is earning in interest rates and what the market is presently paying. For example, a mortgage yielding 7½% in a 15% world is only worth exactly one half of its face value.

The savings institutions think the government should buy back the mortgages since it was the government that mandated low yielding rates during the '50s, '60s, and '70s. The government did this to stimulate the housing industry by having a large pool of cheap money available for mortgages. But it doesn't matter how the savings and loan institutions get out of their pickle, it will be a loss. If the government buys it, taxpayers will pay for it. If they become insolvent, depositors will lose. If the government buys it by issuing more money, inflation will worsen, making interest rates higher, and the value of those mortgages decline more. Another way of looking at the situation is that much of the past growth in housing is going to show up as a loss on someone's books today. It was not real growth. It is deferred payment.*

Of course, if inflation were to stop today, the mortgage values would be restored. But inflation cannot be stopped without bringing the whole economy down on top of itself, an act which would have extraordinary implications in terms of contraction of wealth. Since no one wants to do that, all economic nostrums revolve around the possibility of delicately threading our way through the maze of pitfalls. This forestalling of the consequences of our own actions – to wit, spending too much money for too long in an attempt to replicate the illusion of economic growth – may be ingeniously continued by the government for a short time. The supply-side answers contained within **Wealth and Poverty** by George Gilder (1981, $18.25 postpaid from Basic Books, 10 East 53rd Street, New York, NY 10022) assume that one can change through free markets a condition which is geologic and biologic: the inability of the planet to supply extractive resources for sustained periods of time. What the markets, which the supply-siders trust so deeply but misinterpret, are telling us is right. Energy is worth a bundle. Worth so much in fact, that no pipedream of an expansionist economy can ever be entertained realistically.

And what the economy is telling us is right too: that we are contracting instead of growing; that much of the perceived wealth and assets will disappear in that process; that large scale expansion of most existing industries is uneconomic; and that rather than try to expand, the secrets to operating and surviving within this economy are disintermediative acts rather than intermediative acts, internal differentiation rather than outer expansion.

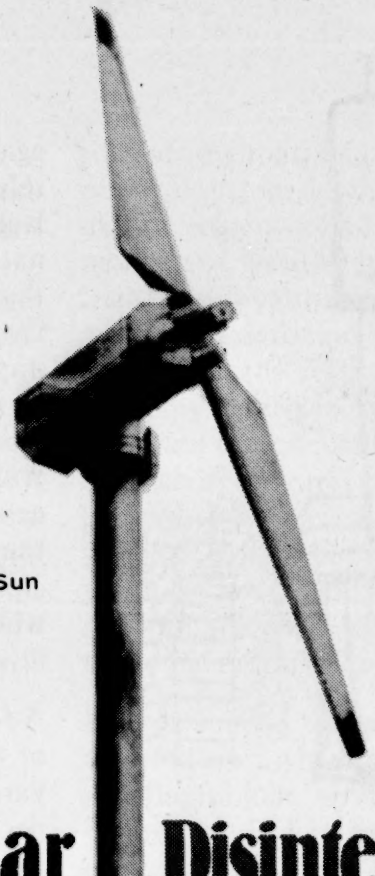
An unusual and ironic way of perceiving inflation is that it is a helpful and hopeful symptom helping us destructure existing economic institutions and restructure new ones. In other words, we can look at the economy not as something falling apart with harsh punitive effects on its constituents, but as a gentle push and firm hand moving us towards what is sensible. Just as allopathic medicine has spent two centuries suppressing and fighting symptoms, we practice an allopathic economic which promotes an economic view which is entirely conceptual as to societal health while ignoring the real economic information underneath.

So, to fly in the face of conventional wisdom, here are some of the good things about inflation (which is just the subtle mask of economic contraction). First, inflation forces everyone to come out of the woodwork and play the game. When currency was stable, you could sock it away and bring it out later with no loss. Banks were seen as vaults, and the interest earned was small and secondary. Now that inflation is chronically high, you will lose money if you stash it. Thus a nation of workers becomes a nation of speculators. Nevertheless, since it forces us to think about money – its value, what it means, and what to do about it – it has broad and in some cases profound implications economically and politically.

Second, because savers are no longer able to ignore the disparity between their passbook rate

The Chrysler bail-out did not exceed $2 billion. The savings and loan bail-out, which is inevitable if inflation does not quickly abate, may cost us 20 to 30 times as much.

***Recently, an ingenious proposal has been attracting wide interest from the savings and loans businesses. Simply stated, S & L's would be allowed to form limited partnerships with investors in high tax brackets. These partnerships would buy the mortgages at face value and then resell them at a loss on the open market. The limited partners would receive huge tax writeoffs, with the proceeds split between the limited partners and the S & L, the general partner. Sound good? What it means is that we taxpayers will foot the bill, making up the lost revenue created by the write-offs. The Chrysler bail-out did not exceed $2 billion. The S & L bail-out, which is inevitable if inflation does not quickly abate, may cost us 20 to 30 times as much. It will require either a large subsidy or large losses. In raw terms, it means that your $1 deposit at Homespun Savings and Loans is worth about 70 cents. Maybe it is time to tiptoe out of S & L's too.**



This is an artist's rendering of the windmills to be used by Windfarms Ltd. for their projects in Hawaii and Solano County. The 4-megawatt machines, to be manufactured by Hamilton Standard of Connecticut, will stand 260 feet high, only 40 feet short of the length of a football field. An elevator inside will afford service access to the nacelle, a structure comparable in size to a railroad box-car, which will house the gearbox, generator and a system of microprocessors and computers for monitoring critical variables including stress, temperature and propeller speed.

Together, the two 15-ton blades will span 260 feet and will each measure 16 feet in breadth at the widest point. They will be constructed of reinforced wound fiberglass and will be hollow inside. A full-grown person could walk inside the blade for most of its length.

—Text and Illustration from Pacific Sun

The One Billion Dollar Disintermediation

My use of the term "disintermediation" implies small-scale, appropriate technology, hands-on, self-sufficient, owner-builder activities. But it is not limited to them. An interesting saga of a disintermediative company is Windfarms of San Francisco. Started by an ex-investment banker in his late thirties, Windfarms has grown from nothing in two years to a company with $1 billion in orders from utility companies for wind-powered energy. Founder Wayne Van Dyck has contracted with utilities on Hawaii and with Pacific Gas and Electric in California to supply electricity entirely generated from windmills. Wayne got around the stumbling block of "unproven" technology by selling utilities the power rather than the machinery. In 1978 Congress passed legislation requiring utilities to buy electricity from hydro or wind-generation facilities that could feed back into their distribution grid. The National Energy Act required the regional utility to pay "avoided costs" – that is, the highest amount they were presently paying for oil-generated energy. The idea was to replace a barrel of oil with some other technology. From Hamilton-Standard, Wayne contracted to buy windmills that include operation and maintenance in their price (in other words, the manufacturer was selling a running machine and is penalized if it breaks down or is inoperable). He hired Bechtel to do the engineering, then insured the whole deal so he could finance it through First Boston to the tune of $350 million for the Hawaiian project alone. Windfarms is an intermediary which in turn is disintermediating oil and the utilities. If successful, Windfarms will be the first large-scale application of alternative technology to the energy picture in the United States.

Windfarms and other in situ producers are changing utilities from producers and distributors to merely distributors. With the high cost of newly-constructed power plants soaring and interest rates battering the industry, some welcome the prospect. Many utilities are so strapped for cash they are paying out their dividends from further borrowings, depreciation, or sale of stock. The total debt load of utilities is so overwhelming that their credit ratings are plunging, making the cost of capital even more dear.

One utility that is not pleased is Southern California Edison. After their splashy announcement a year ago that they would place heavy emphasis on alternative technologies, Southern California Edison would seem the logical place to do business. But Wayne Van Dyck hasn't felt it yet. Windfarms quietly brought up property or options to the San Gorgonio Pass in Riverside County, the ideal location for large-scale wind generation. Windfarms proposals to generate electricity there have been opposed behind the scenes by utility executives. Without naming names, they have spoken out against the Windfarms concept, and tried to make themselves the arbiter of the Environmental Impact Statement.

Why doesn't Southern California Edison want it? For good reason. Windfarms is only the first of many wind companies, and certainly of other forms of alternative energy producers. As they plug into the national energy grid, the power of the utilities is reduced to toll-taker. They charge for use of the lines and meters, which is no small expense, but gone then are its powers to construct nuclear power plants like Diablo Canyon. Gone too is the rationale for breeder reactors or damming wild rivers. If small-scale producers can begin to supply the incremental needs of the utilities, utility companies will have to find a new business.

—PH

What is good about inflation?

1) It forces everyone to come out of the woodwork and play the economic game, which changes the game.

2) It restores economic sovereignty to the individual.

3) Inefficiently large institutions are confronted with their inefficiency.

4) Value is demonetized.

of return and the shrinkage of their capital in buying terms, they are waking up and changing their habits. They are restoring their sovereignty over capital. The disintermediation of financial institutions is shifting capital to high interest bearing funds which loan money only on short maturities. Gone are the halcyon days of long term bonds floated by Ma Bell which yielded 4%. With people taking control over their money, it is becoming increasingly difficult for large scale institutions to finance long term projects. While many would scream and wail over such consequences, arguing that this will lead to economic failure and joblessness, I have been singularly unimpressed with what big companies and institutions do with large amounts of money.

Third, now that the economy has stopped growing, and savers have restored their sovereignty over capital and ceased subsidizing big borrowers, many of the large institutions are having to liquidate their assets to pay the savers. This is another source of gnashing of teeth in financial circles, again the argument being that we are eating ourselves from within.* Yes, but what is completely lacking is the insight that we are witnessing the natural life cycle of a business organism. I believe that the failure of larger institutions to cope with the changes in the economy will provide the impetus for smaller and more nimble institutions to succeed. (See box for one example.) In other words, the marketplace is reallocating the capital. While it is surely true that the large corporations can get a lot of capital, there is no promise that they can use it effectively. Following the principles of classical market patterns, capital will go where it works, and where capital is working now is on the lower tiers of the economic ladder.

A fourth benefit of inflation is the demonetization of values. Because money is proving so fickle a yardstick with which to carry on transactions, people are turning away from it as a transactional tool. People cannot rely on money as a long term measure of value, and that has created a complexity in financial dealings which forces them to consider other alternatives. As long as money was a simple straightforward means of doing business, people did it that way. But with high taxes, shifting values, and general uneasiness, the task of formulating alternative means of commerce is justified as an investment of one's time. This becomes in effect the firmament of a new economy. Furthermore, it opens up the possibility of values beyond the narrow and dehumanizing limits of currency. The invasion of the English language by economic shorthand terms like "bottom line" is a direct result of overemphasis on money as arbiter of value. As money becomes undependable, the natural thing to do is look for other arbiters, and since there is not just one, the relationships among all types of values will enter into our thinking. You cannot barter with someone without appreciating in some fashion their work and craft (if the item is handmade) as well as their time, energy, and skill. This is no longer consumerism. Transactions without money bring humans personally back into the marketplace, the idyllic image that Adam Smith had in mind in **Wealth of Nations** – an ideal which was obviated by the mass economy.

This shift in values breaks up mass markets. Our consumer tastes are fragmenting into a thousand markets. The segmentation of the marketplace makes it more difficult for mass production to satisfy, while at the same time it makes it more possible for smaller businesses to please. This will be a major shift from corporations who "studied" markets and tried to address them – the classic business school approach – to people and friends who "are" the market. When you are producing goods or services that relate directly to your needs,

***Two industries being hard hit are insurance companies and utilities.**

beliefs, and life, there is nothing to study. And that honesty is easily recognized by the consumer. You are no longer selling goods but offering what you know and have learned, be it embodied in a skill or a product. This does not necessarily mean small scale, but it does mean a more direct relationship between producer and user.

This came up for us last week when we were approached by a Fortune 500 company. We being the little tool company called Smith & Hawken. I was interested why such a little speck of a company would be of interest to them, and their reply, although not worded as I will word it, was that they wanted to buy quality niches within the marketplace. This company, which is a household name in consumer products, is recognizing (fast) what many of us are doing naturally. The mass market is fading and being replaced by smaller markets.

George Land (**Grow or Die**, 1974, $4.95 postpaid from Dell Publishing Company, 1 Dag Hammarskjold Plaza, 245 East 47th Street, New York, NY 10017) has a theory of organizational development which is simple and applicable to the economy. He says all organisms grow through three stages: accretive, then replicative, and finally mutuality. Similarly, we can look on the robber-barons, imperialism, colonialism, and further back to feudalism, as the accretive stages of our socio-economic development. Then with Ford came mass production – replication on so large a scale that much of the world now resembles a poor copy of America. The third stage, which we are entering now, is one of mutuality, in which replication has reached its limits (and then some), and the organism turns towards differentiation. The continuous extraction of resources which are blown into the sky through smokestacks to make plastic paper towel holders no longer satisfies. The whole bio-social organism of our economy coughs and has fits. The dispersion of the raw economic power towards the margins creates a de facto type of political system in which social contact and mutual respect are a far stronger cement than money and wealth. Inflation, debt, dislocation, transfer of wealth, impoverishment, soaring costs, asset deflation all run back and forth throughout the culture until an entirely new economy is formed. This is what is to be paid attention to now. Markets are interesting only in as much as they reflect a deeper insight into process. But playing markets is a cul-de-sac. If you lose, you've blown your capital. If you win, you'll get into it and start developing essentially manipulative skills which have little use within the social fabric. Show me a happy speculator.

It is the shift in the relationship of people, capital, and resources which gives us broad direction as to meaningful jobs, services, businesses and pursuits. The markets tell us nothing. So with real estate, my advice is still to tiptoe out of it. But homes . . . homes are what it is all about. ■

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"Heard on the Street: Greenspan Sees Major Risk to the Economy in Near-Insolvency of Some Big Institutions." **WSJ**, 4 March 1981.

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"How Real Are Those Blue Chip Earnings?" **Forbes**, 2 February 1981.

"The Outlook: Why Feds Can't Control Interest Rates." **WSJ**, 26 January 1981.

Burns, Scott. "Over a Barrel." **San Francisco Examiner**, 25 January 1981.

"Changing Credit: Hurt by Inflation, Lenders Switch to Shorter Terms." **WSJ**, 23 December 1980.

"Americans Get Smart about Money." **Los Angeles Times**, 24 March 1981.

Russell, Richard. Dow Theory Letters, no. 798, 17 December 1980.

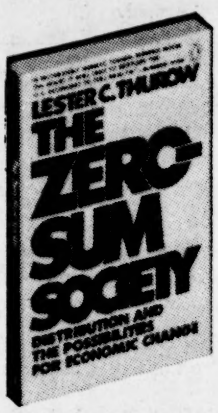
What is bad about inflation?

German stamps issued in the early 1920s were graphically overprinted with increased values to keep up with rampant inflation. Above, left to right, a 400 Mark stamp revalued at 1000 Marks, a 200 Mark stamp revalued at two million, and a 5000 Mark stamp revalued at two million. Inflation and the dismal state of the Germany economy contributed to Hitler's rise to power. –David Burnor

The Zero-Sum Society

Lester Thurow is one of the most original economists writing today. He falls neatly into no camp and manages to offend all sides with his reasoning and logic. **Zero-Sum** *is a crack at the no-free-lunch dilemma America finds itself in after three decades of tumultuous prosperity. Whatever we do, whatever we want, whomever we listen to economically, there are real and unavoidable tradeoffs necessary that Thurow has thoroughly anticipated. But rather than simply analyzing the downside, Thurow provides a long and articulate series of proposals to get us off dead center. He also ironically muses that his solutions have less than a good chance of implementation, but in so doing, points to the fact that it is not for lack of solutions that we stand aside from true economic change — it is due to the fact that few of us will tolerate the possibility of redistributing our nation's wealth. Read Thurow for lack of cant and richness and originality of thought.* —*Paul Hawken*

The Zero-Sum Society
(Distribution and the Possibilities for Economic Change)
Lester C. Thurow
1980; 230 pp.
$5.60 postpaid from:
Viking Press
299 Murray Hill Parkway
East Rutherford,
NJ 07073
or Whole Earth Household Store



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The problem with zero-sum games is that the essence of problem solving is loss allocation. But this is precisely what our political process is least capable of doing. When there are economic gains to be allocated, our political process can allocate them. When there are large economic losses to be allocated, our political process is paralyzed. And with political paralysis comes economic paralysis.

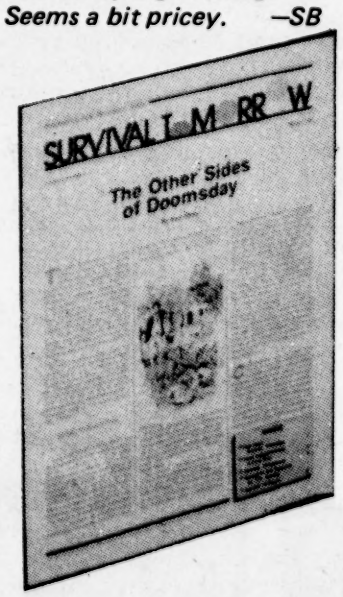
•

Inflation is endemic in a modern economy for a very simple reason. Whenever upward price shocks occur, inflation will occur unless other prices and incomes fall. But in a modern industrial economy, prices and wages in other sectors do not easily fall. There is a substantial amount of downward price rigidity. This is due to both the structure of the private economy and the actions of government. Falling prices mean falling incomes, each of us organizes publicly and privately to ensure that we are not the ones who will experience falling prices and incomes. But if each of us is successful, inflation will be the inevitable result.

Survival Tomorrow

Oho, survivalists are getting serious, i.e. practical, i.e. collaborative. They're learning from rural neighbors instead of shunning them, getting into gardening as well as food storage, even participating in local politics. Preparing for catastrophe is always fun, and this new angle makes it even more so. Cheerily in the thick of it, of course, is editor Karl Hess. His monthly is a densely informative eight pages distributed by high-rolling Kephart Communications. Seems a bit pricey. —*SB*

Survival Tomorrow
Karl Hess, Editor
$60 /year (12 issues)
from:
Survival Tomorrow
P.O. Box 951
Farmingdale, NY 11735



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It could be argued that a stout, small boat, seaworthy and well equipped, is the most independent vehicle for a self-reliant way of living. Rather than the slogan of "five acres and independence," which once summed up the small-farm movement, the small-boat concept could be summed up as "30 feet and independence."

And that's exactly the point of this absolutely first-class book entitled **Sailing the Farm** by Ken Neumeyer (Voyager's Press, 3790 N.E. Linda Drive, Jensen Beach, FL 33457, $11.95).

The book covers everything from selecting a boat to making money with it, using it as a floating base for, in effect, small business. It also covers the possibilities of growing foods, such as bean sprouts, aboard the craft, as well as harvesting ocean fare. Solar devices, onboard greenhouses, tools . . . it's all covered.

•

Suburban Survival Checklist

- How many of my neighbors share my view that this suburb is worth trying to survive in over the long run?
- Are there enough of us to make a viable community, to support local enterprise if things deteriorate in the metropolitan centers?
- Can I get people together now to talk about it?
- Are there regulations inhibiting home business or other matters pertinent to converting this suburb to self-reliance?
- Is there a reasonable hope of local political power being exercised by survival-minded folks as opposed to speculators and bureaucrats?
- Can our yards be converted to garden spaces?
- Are there public or other buildings that could be a future base for local light industry?
- Do I have skills that can be put to use locally?
- Could my family become a home-based production group?
- What local groups (churches, civic clubs, etc.) could be mobilized toward an interest in survival of this suburb?

Carcinogen listing

The Center for the Biology of Natural Systems in St. Louis has compiled a free alphabetized listing of all known human and animal carcinogens. The current bulletin runs to 209 entries — from simple natural substances like creosote to synthetics like Tris (1-aziridinyl) phosphine Sulfide. —*Richard Nilsen*

CIP Bulletin #14
(Carcinogen Information Program)
Center for the Biology of Natural Systems

free with legal size, self-addressed stamped envelope
from:
Center for the Biology of Natural Systems
Washington University
St. Louis, MO 63130

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Chloroform (67663)
Chloromethyl methyl ether (107302 - See #125)
Chromium Compounds, Hexavalent
Chrysene (218019)
Citrus Red No. 2 (6358538)
Coal Tar and Soot
Coke Oven Emissions
Creosote (8001589)
Cycasin (14901087)

Metric Madness

Metric conversion is on the wane. (Even the California Metric Conversion Council, considered the leader of its kind, has nothing to do these days and is contemplating self-termination.) Nevertheless there are lingering enthusiasts and leftover pockets of the former momentum for metric who might benefit from exposure to this book, the only one to express the majority view — that metric conversion leads to no advantages and major disadvantages. Author Batchelder, an engineer I believe, is argumentative, funny, and has marshalled about half of the overwhelming case against conversion.

(Dear metricators about to set me straight, I've been on the California Metric Conversion Council for over two years and am excessively familiar with facts and arguments on both sides. I honor metric — S.I. anyway — for its uses in science, and for that reason I favor continued dual teaching of metric and customary measure in schools. Otherwise I am glad to see conversion going the way of Esperanto and New Math. Whatever the worthiness of the idea, it didn't work at all. There's no shame in that. Most good ideas don't.) —SB

•

In 1973 George C. Lovell reported that "actually two-thirds of the world's production of manufactured goods are to inch specifications." This figure appears to be highly plausible when goods manufactured in the Commonwealth countries and to indigenous measures in other nations given in the preceding table are added to our production. Even the world's largest truck factory in Russia, the Kama River plant, is inch-based.

•

French, German and Italian metric screw thread standards are different for the reason that they don't want other people's products to fit theirs. It is not only silly but reveals ignorance of the subject when metric zealots tell us to use metric standards when in most cases they are nonexistent or, as with metric screws and nuts, metric countries are not using universal metric interchangeability standards.

Metric Madness
(Over 150 Reasons for NOT Converting to the Metric System)
J.W. Batchelder
1981; 245 pp.
$6.95 postpaid from:
The Devin-Adair Company
143 Sound Beach Avenue
Old Greenwich, CT 06870
or Whole Earth Household Store

Biological damage standards

It occurred to me a while back, while reading of the Ames and other short-term tests, that it should be possible to develop a standard measure of biological damage since all insults (radiation, chemical, microwave, etc.) actually occur on the molecular level. Such a standard would help a community decide which health threat is the greatest and therefore help it allocate resources to fix the problem.

Some work seems to have been done, but none was really aimed at a common exposure index. The closest is a rad-equivalence for exposure to hazardous chemicals. This has been defined as the absorbed dose of ionizing radiation (X- or Gamma Rays) that causes, under defined conditions, the same effect as a given dose of a chemical mutagen.

I offer the following table in the hope that you might find it important enough to inspire some interest among the biologists with whom you might come in contact.

DOSE	TEST SYSTEM	RAD-EQUIVALENCE
Hycathon-methane-sulfonate (therapeutic dose 3mg/kg for treatment of schistosomiasis)		
30 mg/kg	mutations in mouse cells	1.8 rad
30 mg/kg	chromosomal aberrations in human tissue cells	1.0 rad
30 mg/kg	lethal mutation to Drosophila spermatozoa	1.8 rad
Ethyl-methane-sulfonate (used for mutation breeding)		
1240 mg/kg	rodents	1500 to 2000 rad
30 mg/kg	Tradescantia (spiderwort)	30 rad
Nitrites 0.17 mg/kg ingested per day (U.S. estimate) and if chronic ingestion has 1/3 effect of acute dose and if the spermatozoa are mutation susceptible during 10% of the spermatogenesis cycle results in a genetic burden of 8 rad per generation.		
15.6 mg/kg	Drosophila spermatozoa	1 rad
Formaldehyde Southern France natural gas deposits result in 20ug/m^3 in the air, leading to equivalent radiation load of 2.5 to 5 rad per annum vs. maximum permissible load of ionizing radiation of 0.17 rem per annum.		
1 mmole for 1 minute	hamster tissue yeast cultures E. coli	14 rad
Benzopyrene In large cities concentration in air is 1 to 4 ng/m^3 but in industrial areas can be as high as 240 ng/m^2; i.e., 300 times max. permissible.		
1 nanogram/m^3	IAEA Bulletin, but I don't have the specific issue.	0.240 rad/annum
Ethylene (metabolizes to ethylene oxide) .05 ppm in air which is common would yield about 0.5 rad/year but 20 cigarettes per day would yield enough ethylene oxide to give an equivalent of 3.5 rad/year.		
1 ppm in air for 1 hour	DNA in mouse hemoglobin	.001 rad

The preceding table is from H. Glubrecht's survey paper in "Atomenergie-Kerntechnik" (Bd. 33, Lfg 2, 1979). Other studies seem to indicate that a seven day exposure to 0.2 ppm of ozone is equivalent to 230 rads in hamsters. Ozone and paraquat have similar effects on rats.*

Bill Brown
Los Altos, California

*This is a layman's (me) understanding of (1) "Pulmonary Alterations in Rats Exposed to 0.2 and 0.1 ppm Ozone," C.G. Plopper, **Archives of Environmental Health**, Nov. to Dec. 1979 (Vol. 34, No. 6) and (2) a note from Dr. L.A. Sagan at Electronic Power Research Institute in Palo Alto.

WHOLE SYSTEMS

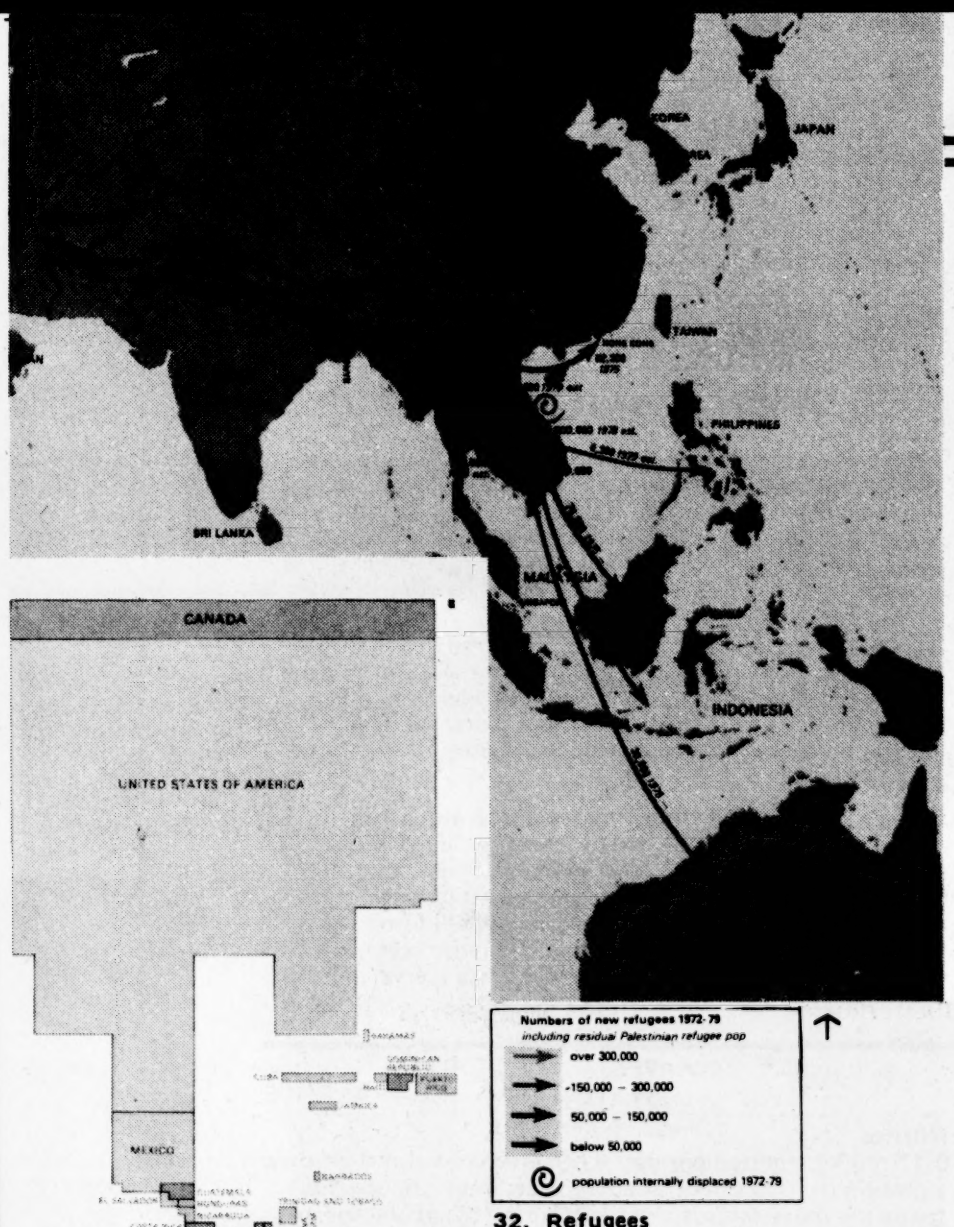
The State of the World Atlas

Put this next to the superb **Times Atlas of World History** *(***NWEC** *p. 34) as far the most provocative atlas of contemporary history. Understanding leaps to your eye when you survey a map such as "No. 32, Refugees," where arrows and numbers show the torrents of dislodged humans sluicing across continents and oceans (100,000 from Argentina to Spain since 1976? 130,000 from China to Hong Kong in 1979 alone?) Wonder what nations have political prisoners, the death penalty, or routine torture – check map No. 31. Wonder where the gold is, the unemployment, the nuclear weapons, the nuclear reactors, the jobs, the separatist movements, education, the worst slums, the degrees of inflation, the degrees of population growth, the degrees of pollution?*

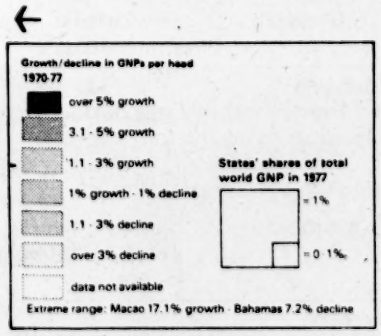
A fascinating hour here, and all the world news you see will begin to make sense.

This book, or one like it, should become an annual world report, sumptuously funded, ever more closely researched and read and heeded.

(Note: Our black-and-white reproduction does no justice to the highly effective color coding in all the maps.) –SB

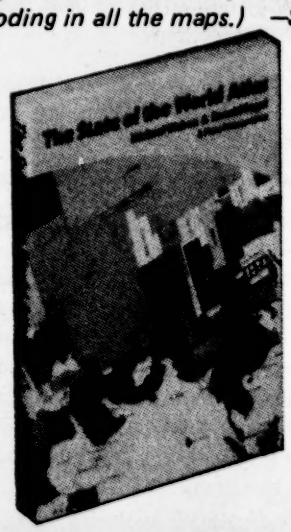


32. Refugees



23. National Income

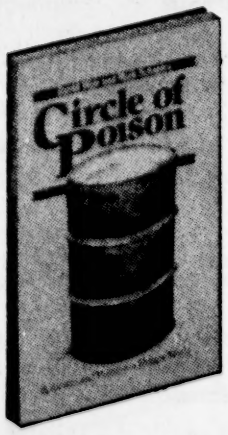
The State of the World Atlas
(A Pluto Press Project)
Michael Kidron and
Ronald Segal
1981; 172 pp.
$9.95 postpaid from:
Simon and Schuster
Attn: Order Department
1230 Avenue of
the Americas
New York, NY 10020
or Whole Earth
Household Store



Circle of Poison

A product is declared dangerous and banned for sale in the U.S. The manufacturer/distributor shrugs and covertly sells ("dumps") the stuff in Third World markets. If you're sufficiently cold you might say, "Fine, let the buyer beware, population has to be controlled some way," etc. But don't drink the coffee from those countries – hence "circle" of poison. Still the only book on the subject, the very model of investigative journalism at its finest. *–SB*

Circle of Poison
(Pesticides and People
in a Hungry World)
David Weir and
Mark Schapiro
1981; 100 pp.
$4.50 postpaid from:
Institute for Food
and Development Policy
2588 Mission Street
San Francisco, CA 94110
or Whole Earth
Household Store



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To escape regulation in their home countries, the multinationals have discovered a clever strategy: they simply ship the separate chemical ingredients of a banned pesticide to a third world country, then manufacture it there in "formulation plants." From the third world country, the prepared pesticide can often be re-exported to any third country, free of regulation.

"It's a real Mafia-type operation," says Dr. Harold Hubbard of the U.N.'s Pan American Health Organization. "Global companies are setting up formulation plants all over the world. [They] simply go into less developed countries, give a banned pesticide a local name, and then turn around and sell it all over the world under that new name."

"Formulators buy basic ingredients from importers and then put them together and call the product a name like 'Macho' and say it will kill anything," explains Frank Penna, a consultant to the Policy Sciences Center. "Usually it ends up killing the farmer."

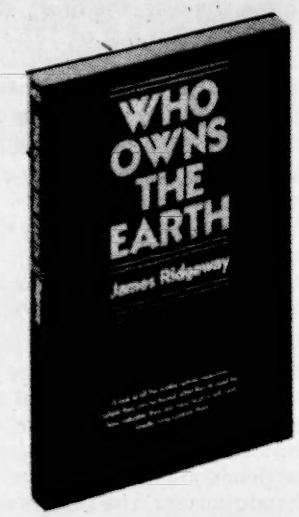
("Macho" competes with other chemical weapons with such names as Ambush and Fumazone to battle an army of enemies led by kernel smut, the stinkbug, the whorl maggot, and the black whip and tip smut.)

The pesticides are dangerous before they ever reach the fields. A plant in Kenya which formulates BHC provides no protection for the workers mixing the chemicals. "The workers' eyes were all sunken, and they looked like they had TB," says a University of Nairobi professor who visited the plant. "There are regulations against this sort of thing, but there is no manpower for enforcing the regulations. And no one complains. The workers are perfectly happy until one of them gets sick, and then he's just fired."

Who Owns the Earth

If you can conceive of commodities markets as a huge soap opera, then this book is the plot summary for people who haven't been paying attention too closely. In the earlier episodes economics married natural resources and they had a bunch of multinationally corporate children, now grown and busy harvesting, extracting, and sometimes even competing for world markets. Capsule histories about which ones control 50-odd natural resources — everything from bauxite to human blood — combine to impress that so few own so much. Any book that can change statistics into interesting reading deserves credit; this one does. —Stephanie Mills

Who Owns the Earth
James Ridgeway
1980; 154 pp.
$8.95 postpaid from:
Macmillan Publishing Co.
Order Department
Front and Brown Streets
Riverside, NJ 08075
or Whole Earth
Household Store



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Because of the energy crisis we are conditioned to think in terms of shortage — a shortage of oil for gasoline, of cobalt for aircraft parts, of coffee or of rice. But history instructs the opposite has also been the case: Surplus, not shortage, has been the driving force in the building of markets, creating supply, and determining price. Indeed, it can be argued that a central concern of the modern world economic system during this century has been to organize and promote markets so that they are protected from ruinous surplus.

●

Spices are particularly sensitive to cornering operations because they are produced in only a few areas and can be stored relatively easily for long periods of time. As a result, the spice trade has always been dominated by a single entity. Today, that entity is McCormick and Company, Inc., with its 32 divisions, subsidiaries, and licensees in 18 countries.

McCormick accounts for over 50 percent of the U.S. spice market and a sizable chunk of European, Asian, and Latin American sales. The company blocks attempts at cartelization and controls prices by maintaining large stockpiles of natural spices as well as a full line of synthetic spices.

The international commodities market in spices is a gambler's paradise. Prices fluctuate so drastically that a 100-percent increase within two or three years is not unusual.

●

The current illicit heroin trade in Southeast Asia can be traced directly to the chemists of Shanghai and their descendants, who under the British were at the center of the business. In 1951, two nationalist Chinese divisions that fled from the Communists into Burma brought the heroin business with them. In Burma, these two divisions were reequipped by the American CIA and the Nationalist Chinese, who by that time had set up their government in Taiwan. Later, many of the soldiers who had fled to Burma were repatriated to Taiwan. But basically, the business in Burma was set up by these nationalist Chinese, who themselves were descendants of the Shanghai chemists, and they run it now.

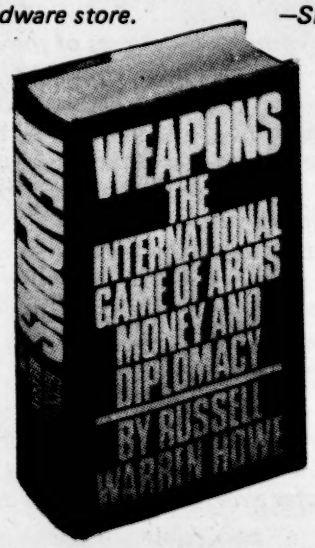
A farmer lances the pod of the poppy, then scrapes up the white sap that oozes out.

Weapons

An utterly fascinating perspective on our times, this comprehensive account of the world's weaponry is guaranteed to make your blood beat fast — with fear, rage, excitement, or most likely an amalgam of all of them. Fear because a goodly portion of the weapons are aimed directly at your life. Rage because of frustration at the overwhelming immunity of arms trade and arms races from any efforts by you and yours to unhinge them. Excitement because here are huge and important secrets revealed and half-revealed, the riveting stuff of spy fiction played out in all too real reality. The profoundest insanity of our age is explored in intimate technical details, and at the same time here is the cutting edge of our extraordinary technology. Does NASA continually remind you of all the wonderful technological spin-off from the space program? It's a tiny fraction of what spins off unbragged-of from weapons technology.

If you're wondering why everybody is behaving so oddly these days, you'll find a lot of the answer — or at least the context — in this bigtime hardware store. —SB

Weapons
(The International Game of Arms Money and Diplomacy)
Russell Warren Howe
1980; 798 pp.
$19.95 postpaid from:
Doubleday and Company
501 Franklin Avenue
Garden City, NY 11530
or Whole Earth
Household Store



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When fully operational, the NavStar Global Positioning System will consist of three groups of eight satellites each, in three separate, overlapping, twelve-hour, circular, synchronous orbital planes, giving continuous global coverage from an altitude of 12,500 miles. The Air Force will not call the twenty-four a wing or a squadron, but a constellation, no less. Most users will have receivers that can lock on to four satellites, but some supersonic aircraft will carry five-channel receivers to ensure that at least four are always available for navigational cross-references. A navigator would get continuous tri-dimensional position fixes, based on determination of his speed to within 10 centimeters (4 inches) a second.

●

Perhaps the most interesting source of Communist arms supplies in the world today is in neither Russia, nor China, nor Czechoslovakia, but in Vietnam. These are "Communist weapons" made in America. Yet the role that the huge mountain of weapons left behind there after the Thieu debacle is playing on the arms market remains shrouded thus far in mystery. Officially, few of these arms are for sale — to hear the Pentagon sources tell it, none of them are for sale at all. Yet the arms make Vietnam, on paper at least, the third most armed nation on earth, after the two superpowers. Nonetheless, Vietnam seems genuinely reluctant to sell.

●

The French arms industry does not usually have to send supersalesmen overseas — the French Government does most of their salesmanship for them. But then, most of the French arms firms are government-owned. France's parastatal war industry is geared for export. Already by 1969, arms were 15 per cent of all French exports. About 60 per cent of all French aircraft production was sold abroad, 70 per cent of these orders being military. France was at the time the "free world's" largest exporter of helicopters, and has since become its main exporter of submarines.

A People's History of the United States

This is not the U.S. history the majority of us learned in school. In those rooms, the name Columbus rarely got linked with the word genocide. (An estimated 250,000 Arawak Indians died between his arrival and the year 1508 from war, slavery, and forced labor.)

A People's History of the United States *is a book with strong biases, but unlike most histories of this country, the biases are clearly stated:*

". . . Nations are not communities and never have been. The history of any country, presented as the history of a family, conceals fierce conflicts of interest (sometimes exploding, most often repressed) between conquerors and conquered, masters and slaves, capitalists and workers, dominators and dominated in race and sex. And in such a world of conflict, a world of victims and executioners, it is the job of thinking people, as Albert Camus suggested, not to be on the side of the executioners."

What sets this book apart from previous histories is its reversal of point of view. The discovery of America is seen through the eyes of the Arawaks, the Constitution is seen from the viewpoint of the slaves, the Civil War is viewed from the perspective of the New York Irish, and this reversal of viewpoint continues right up through the last decade. Zinn maintains that the biggest problem with traditional histories of the U.S. is that they "weigh oppressively on the capacity of the ordinary citizen to act. They suggest that in times of crisis we must look to someone to save us: in the Revolutionary crisis, the Founding Fathers; in the slavery crisis, Lincoln; in the Depression, Roosevelt; in the Vietnam-Watergate crisis, Carter."

In historical terms, we can never determine the direction we are facing unless we understand the direction from which we've come. **A People's History of the United States** *provides some useful coordinates. —JV McShirley*

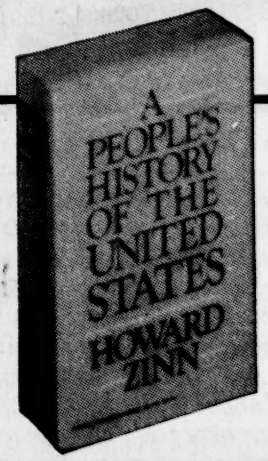
●

The Irish working people of New York, recent immigrants, poor, looked upon with contempt by native Americans, could hardly find sympathy for the black population of the city who competed with them for jobs as longshoremen, barbers, waiters, domestic servants. Blacks, pushed out of these jobs, often were used to break strikes. Then came the war, the draft, the chance of death. And the Conscription Act of 1863 provided that the rich could avoid military service: they could pay $300 or buy a substitute. In the summer of 1863, a "Song of the Conscripts" was circulated by the thousands in New York and other cities. One stanza:

We're coming, Father Abraham, three hundred thousand more,
We leave our homes and firesides with bleeding hearts and sore
Since poverty has been our crime, we bow to thy decree;
We are the poor and have no wealth to purchase liberty.

When recruiting for the army began in July 1863, a mob in New York wrecked the main recruiting station. Then, for three days, crowds of white workers marched through the city, destroying buildings, factories, streetcar lines, homes. The draft riots were complex — antiblack, antirich, anti-Republican. From an assault on draft headquarters, the rioters went on to attacks on wealthy homes, then to the murder of blacks. They marched through the streets, forcing factories to close, recruiting more members of the mob. They set the city's colored orphan asylum on fire. They shot, burned, and hanged blacks they found in the streets. Many people were thrown into the rivers to drown.

On the fourth day, Union troops returning from the Battle of Gettysburg came into the city and stopped the rioting. Perhaps four hundred people were killed. No exact figures have ever been given, but the number of lives lost was greater than in any other incident of domestic violence in American history.



A People's History of the United States
Howard Zinn
1980; 614 pp.

$9.20 postpaid from:
Harper and Row
Mail Order Department
10 East 53rd Street
New York, NY 10022
or Whole Earth
Household Store

The Time Falling Bodies Take to Light

William Irwin Thompson is out to show that the myths made up by scholars about our distant past (cavemen, territorial Neanderthals, and all that) are at least as limited and specific to their cultures as myths made up by other tribes. Since their myths about the past limit our ideas about what we can do in the present and future, he's also out to make up some new myths.

It's really fun to watch him go at it. He's familiar with all the 20th century history mythmakers — feminists, Freudians, Marxists, ethnobiologists, anthropologists — and he uses them all sometimes and, I'm sure, offends them other times. I'm interested, but not always convinced, by his myths about, for example, how many male and female humanoid primates hung out in a typical group on the savannahs of Africa, and how that affects how women and men hang out today. I'm fascinated, and completely convinced, by his driving conviction that to create a new world we need new myths. Myths make the world we believe we live in and we need to stop leaving their creation to Ph.D.'s and ideologues. Read Thompson's book, and if you don't like his myths, go out and make some of your own. —Anne Herbert

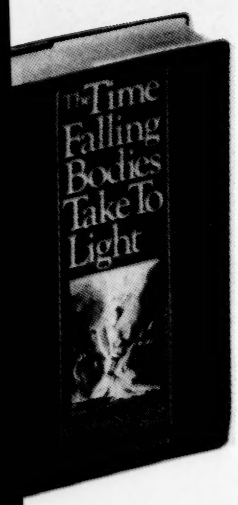
●

The question of the existence of a historical matriarchy is difficult, because the subject is so connected to the emotions of archaeologists and historians that it is impossible to discuss it without encountering castration anxieties in men and shouts of triumphant amazon joy in feminist scholars. . . .

The difficulty is that when a man thinks of matriarchy, he thinks of a patriarchy with women in the place of men; he does not stop to consider that matriarchy may be a complete mirror-image. Where patriarchy establishes law, matriarchy establishes custom; where patriarchy establishes military power, matriarchy establishes religious authority; where patriarchy encourages the *aresteia* of the individual warrior, matriarchy encourages the tradition-bound cohesion of the collective.

●

Myth is the history of the soul. The history of the ego, with it succession of kings and empires, technologies and wars, is what we are all taught in school As the lie commonly agreed upon, history becomes the apology for whatever class is in power or wishes to come to power. In our age a class of behavioral and political scientists hopes to wield power over nature and culture, and through genetic engineering and sociobiology to alter the natural selection of the body and the artificial selection of culture to create a perfect, scientific society — rationally planned and rationally managed. Myth and religion, as the old ancestral heritage from the dark ages before the rise of the Technological Society, stand in the way, and so the social scientists have rewritten history to bring it under their control.



The Time Falling Bodies Take to Light
(Mythology, Sexuality and and the Origins of Culture)
William Irwin Thompson
1981; 280 pp.

$14.95 postpaid from:
St. Martin's Press
175 Fifth Avenue
New York, NY 10010
or Whole Earth
Household Store

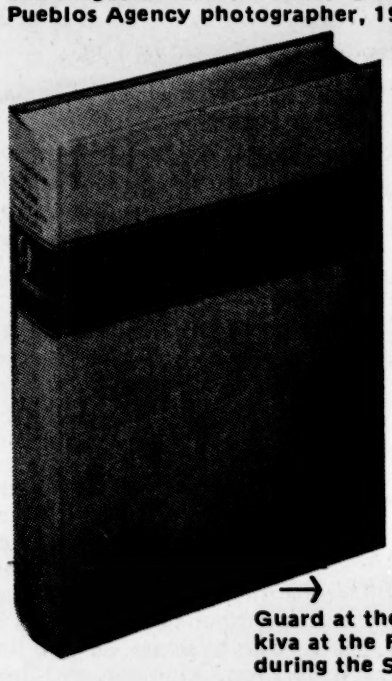
← "Waffle gardens" at Zuni. The rectangular compartments, enclosed by ridges of clay earth, retain water. Traditionally, fruits and vegetables such as melons, herbs, chili, and onions were grown in these small garden plots, which were enclosed with sticks or adobe walls and irrigated from the river. United Pueblos Agency photographer, 1940.

Handbook of North American Indians Volume 9: Southwest

This is the third volume to be completed of the eventual 20-volume work. (See Volume 15: Northeast and Volume 8: California, **NWEC** *p. 45). It covers only the Pueblo cultures, the most durable of all native Americans. A later volume, No. 10, will cover the other Southwest tribes — Navajo, Apache, Papago, etc. As usual, peerless work.* —SB

Handbook of North American Indians
(Volume 9: Southwest)
Alfonso Ortiz, Editor
1979; 701 pp.
No. 047-000-00361-0

$17 postpaid from:
Superintendent of
of Documents
U.S. Government
Printing Office
Washington, DC 20402
or Whole Earth
Household Store



→ Guard at the entrance to the Antelope kiva at the First Mesa village of Walpi, during the Snake-Antelope ceremony.

•

The Pueblo peoples are the only one of the cultural groups identifiable as long ago as two millennia that have survived with clearly unbroken cultural continuity into the last quarter of the twentieth century. In their greatest time, from the tenth through the thirteenth centuries, they built and occupied the great architectural wonders at Chaco Canyon, Mesa Verde, Casa Grande, and numerous other places spread out over what are now five large states. During this time they ranged from mountain to canyon and even to the higher desert elevations. During the persistent drought that haunted the Southwest in the last quarter of the thirteenth century, the Pueblo people began contracting into the great valley of the Rio Grande and its tributaries. Only the Hopi, then as now, enigmatically hung on and persisted in farming successfully in a region with no permanent or semipermanent watercourses.

The other Pueblo groups maintained their way of life — characterized in essence by intensive horticulture, and elaborate ceremonial cycle, and a cohesive social organization — in the villages of adobe and stone that, for the most part, are strung along the Rio Grande and its tributaries like beads upon a crooked string. These villages all blend in with their surroundings so that one never knows one is approaching a Pueblo until one is right upon it. The architecture of the Pueblos is gentle and unobtrusive, as, indeed, are the Pueblo peoples' very character, customs, institutions, and art forms. The Pueblo peoples have shown a genius for maintaining that which is most essential to their lives while also receiving, absorbing, and reinvigorating the decaying "vines" — to use the appropriate and evocative Tewa metaphor — of other ways of life. Hence, the Pueblo legacy has been to endure.

Gregory Bateson live

Dear **CQ**,

Those of us who knew Gregory Bateson or heard him speak will miss his presence keenly. One way of partially recapturing his magic is to hear cassette tapes of his workshops and lectures. For those who never heard him these tapes add a new dimension to his writing. The following list contains all the tapes now available that I know of.

Dolphin Tapes, Hot Springs Lodge, P.O. Box 71, Big Sur, CA 93920. $9 each (complete set $88) plus $2 postage to total order.

Metaphors and Butterflies — May 1975
Schizophrenia and the Double Bind — May 1976
The Pattern Which Connects — December 1978
What is Epistemology? — September 1979
Civilization and Addiction (2 tapes) — November 1979
Interfaces — Boundaries Which Connect — February 1980
It Used to Matter — March 1980
Neither Mechanical Nor Supernatural — April 1980
It Takes Two to Know One (2 tapes) — May 1980
Simple Thinking — April 1980

The Lindisfarne Association, The Lindisfarne Press, RD 2, East Alford Road, West Stockbridge, MA 01266. $7 each, postpaid.
Mind In Nature
How We Know What We Know
The Thing of It Is
Discussion with Bateson
Education and/or Learning

Vajradhatu Recordings, Naropa Institute, 1345 Spruce Street, Boulder, CO 80302. $8 each postpaid.

Intelligence, Experience and Evolution — March 1975
Orders of Change (2 tapes) — August 1975

Pacifica Tape Library, 5316 Venice Boulevard, Los Angeles, CA 90019. $15 postpaid.

An Anthropoligist Views the Social Scene
(No. BB2368) — 1970

Cognetics, P.O. Box 592, Saratoga, CA 95070.
$8 postpaid.

The Mind (No. 331) — 1977

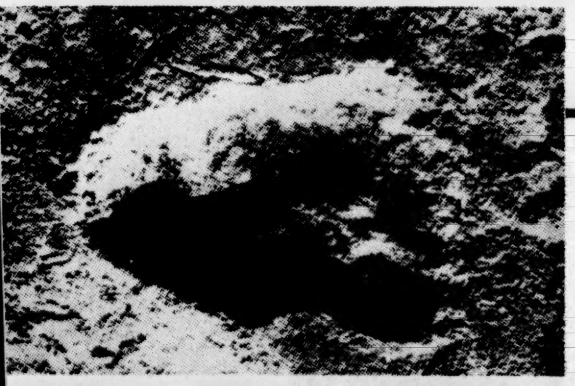
Chautauqua Institute, Box 1095, Chautauqua, NY 14722. I wrote to these people but never got a reply. Heard about the tape from a friend. If you try and have better luck, please let me know.

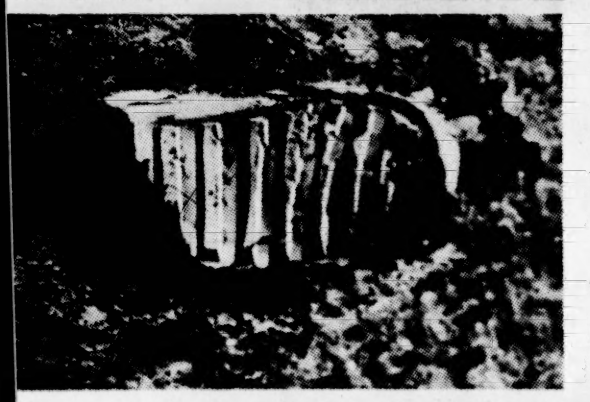
Contexts of Family

If anyone knows of any other Bateson tapes available either commercially or privately (e.g., a couple of years ago in Summer '78 **CQ** there was a tape of Gregory speaking in Michigan which was not for sale), please write to me at the address below. I would also like to know of any printed material that may be available. The Lindisfarne Association, for instance, publishes a letter by him (No. 11, $3) entitled "Metaphor and the World of Mental Process."

Michael Yocum
1 Dugdales
Croxley Green, Rickmansworth
Hertfordshire, England

BOX 428 SAUSALITO CA 94966



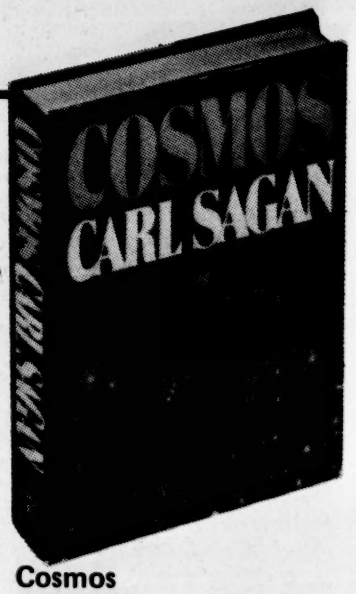


Two human footprints. Above, from Tanzania, 3.6 million years ago. Below, from Mare Tranquilitatis, 1969. Courtesy Mary Leakey and the National Geographic Society; and NASA.

Cosmos

Human knowledge used to be divided into: 1) our people; 2) everything else. In the last decade or so, it's started to divide differently: 1) Earth; 2) everything else. This new book is now the best introduction to understanding everything in the context of Earth, and Earth in the context of everything else.

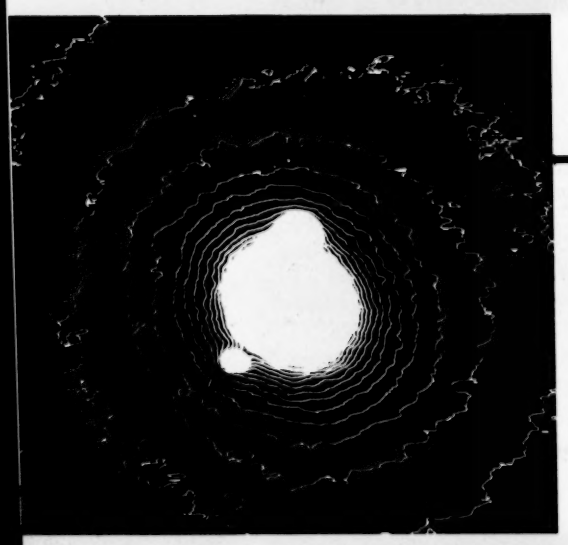
It's a personal view — Carl Sagan's — derived from his public television series of the same name. I liked those programs far less than this book, but clearly the necessarily graphic research for video yielded a rich inventory of images for the book. (They are mostly new and mostly highly illuminating and knowledgeably captioned. That's rare in the field of popular astronomy, where half-decent images are recycled forever.) Carl is opinionated as well as insightful; both characteristics give the book its life. Both are invigorating. You might well wind up on another planet just to refute his preference for robots in space. —SB



Cosmos
Carl Sagan
1980; 365 pp.
$20.95 postpaid from:
Random House
400 Hahn Road
Westminster, MD 21157
or Whole Earth
Household Store

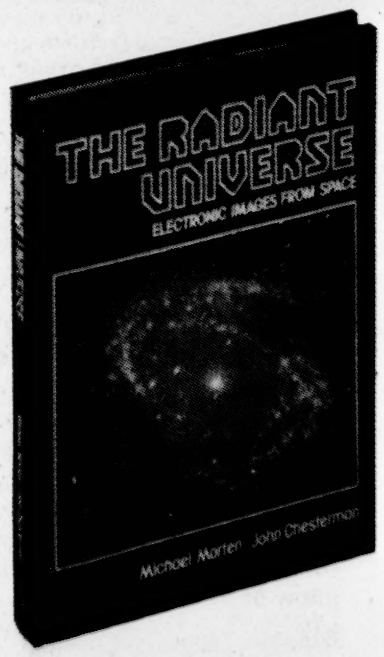
•

Neutron star matter weighs about the same as an ordinary mountain per teaspoonful — so much that if you had a piece of it and let it go (you could hardly do otherwise), it might pass effortlessly through the Earth like a falling stone through air, carving a hole for itself completely through our planet and emerging out the other side — perhaps in China. People there might be out for a stroll, minding their own business, when a tiny lump of neutron star plummets out of the ground, hovers for a moment, and then returns beneath the Earth, providing at least a diversion from the routine of the day. If a piece of neutron star matter were dropped from nearby space, with the Earth rotating beneath it as it fell, it would plunge repeatedly through the rotating Earth, punching hundreds of thousands of holes before friction with the interior of our planet stopped the motion.



The Radiant Universe

Subtitled "Electronic Images from Space," this is an unusually intriguing collection of dazzlers. Big, full color, many of the images are fascinating, many are gorgeous, many are both. We are enhancing vision right out of this world. —SB



The Radiant Universe
(Electronic Images from Space)
Michael Marten and John Chesterman
1980; 128 pp.
$17.95 postpaid from:
MacMillan Publishing Co.
Order Department
Front and Brown Streets
Riverside, NJ 08075
or Whole Earth
Household Store

←

Radiation flows in a continuum without edges or boundaries, but the machines we use to record it work in discrete steps, making precise measurements with lines and contours. The visual shorthand that results from this compromise (such as this example) can look misleadingly real, and it is important to remember that they are diagrams of systems, not pictures of objects.

Paradoxically, the images are both true (they are based on actual measurements) and false (the lines do not exist as boundaries in space). Computer processing can even throw them into high relief, a step toward artificiality that makes them even more real.

← The landscape of Europa, the third moon out from Jupiter, has no mountains or glaciers — or indeed any other surface features. In fact, it is so unnaturally smooth that even at high resolution it is impossible to detect the slightest bump or irregularity.

The reason for this is that Europa is the youngest member of the solar system. It was only formed between 10 and 100 million years ago and the surface has not yet hardened. In order to produce mountains a planet must have a solid crust. The surface of Europa, however, appears to have the consistency of slush, with lava welling up along broad bands which criss-cross the surface.

Europa was one of the first of the minor planets to be discovered by Galileo, in 1610, yet it has taken us till now to realize this single most important fact about it. The same applies, of course, to all these images. It is difficult to grasp the extent to which our ideas have changed, and how banal the guesswork now seems compared to the reality.

Extinction

If you thought saving the whale was hard and important, try saving everything else. It's wonderfully complicated business. Extinctions of species are complicated. The reasons to preserve are complicated. Preservation is complicated. Population biologists Paul and Anne Ehrlich are unusually qualified to guide your attention into and through the labyrinth. You're not getting the word secondhand from a journalist but direct from a pair of highly regarded scientists in the field and highly effective ecological activists (see **Ecoscience, NWEC** *p. 52). This book is finely detailed texture of biological anecdote and argument. Fascinating, convincing, motivating reading.*

Paul Ehrlich co-invented our guiding idea, "coevolution." Is there such a thing as co-extinction, Paul? —SB

•

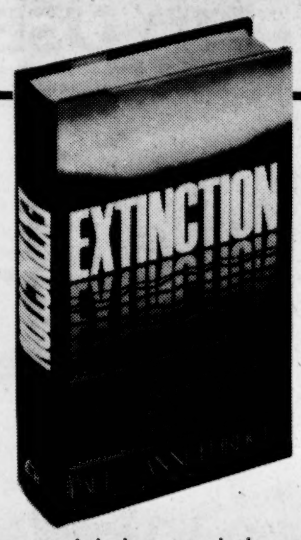
The crucial battles of the conservation movement will not be fought over Gorillas or whales or leopards or Snail Darters. They will be fought, like most military battles, over pieces of terrain — of *habitat. Only* by saving habitat can most species and populations be preserved in the long run.

•

A second potential source of genetic variability for crops is the array of wild strains and species closely related to the domestic ones. Wild relatives of cultivated grains — some inconspicuous grasses like those we saw in Israel — have already been used to introduce new and desirable characteristics into their domestic cousins. A Turkish wild wheat bred with American strains conferred on them resistance to a series of wheat diseases known as "bunts." The value to American agriculture is estimated at $50 million for the useful life of this single genetic improvement alone.

A wild relative of corn recently discovered in Mexico is perennial — that is, it lives as a plant year after year rather than surviving between growing seasons only as seeds.

Extinction
(The Causes and Consequences of the Disappearance of Species)
Paul Ehrlich and Anne Ehrlich
1981; 305 pp.
$16.95 postpaid from:
Random House
400 Hahn Road
Westminster, MD 21157
or Whole Earth Household Store



If through hybridization the perennial characteristic could be transferred to the crop, farmers would no longer have to plow their cornfields and sow the crop anew each year. The savings in dollars would be enormous, and the reduction of soil erosion would be tremendously important.

Unhappily, population pressures, the spread of cultivation, urban sprawl, and habitat destruction in general are increasingly exterminating populations of wild and semi-wild ancestors of crop plants. In recent decades, famines in Nigeria, Ethiopia, and the Sahel have led to the loss of much diversity among natural populations of edible plants as people and their animals ate virtually everything growing. The filling of Lake Nasser in the 1970s behind the Aswan High Dam drowned out strains of grains used as feed for domestic animals, which are impossible to replace.

•

The worst thing that can happen — will happen [in the 1980s] — is not energy depletion, economic collapse, limited nuclear war, or conquest by a totalitarian government. As terrible as these catastrophes would be for us, they can be repaired within a few generations. The one process ongoing in the 1980s that will take millions of years to correct is the loss of genetic and species diversity by the destruction of natural habitats. This is the folly our descendants are least likely to forgive us.
—E.O. Wilson, **Harvard Magazine**, January-February 1980

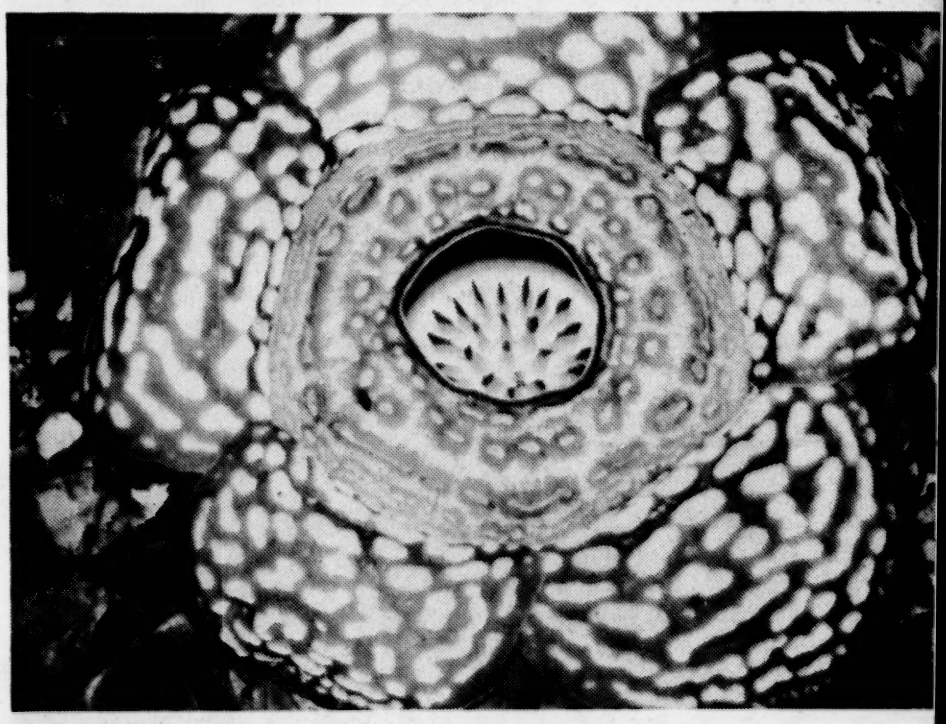
Jungles

Rainforests are the Earth's most complex, most diverse, oldest, and probably most threatened ecosystems. They have been reduced to about half of their former extent and are further diminished by an area about the size of Delaware every week. It is likely that approximately one million kinds of plants and animals, one quarter of all that exist, will become extinct in the rainforest regions in the next thirty years. Subsistence agriculture, spread by the growing population of the tropics; cattle ranching and commercial agriculture, largely for export; and one-shot logging are the main agents of destruction. These processes are not adapted for sustained yields in the delicate rainforests and must continually move on to fell more forest. This loss is one of the major events in the history of life on the planet.

Jungles *is the only recent gathering of our knowledge of rainforests in a popular form. The authors and researchers have done an excellent job of lifting the "green curtain" and giving us a broad and detailed look at the interwoven abundance of rainforest life. The sections on plants, animals, ecology, products of the jungle, and tribal life are beautifully illustrated with color photographs and numerous original paintings and line drawings. The analysis of the political and economic roots of the threat to the forests is unfortunately brief and weak. The lack of a bibliography is regrettable. —Bret Blosser*

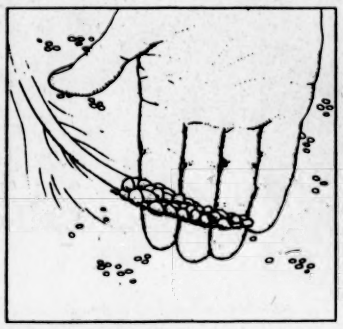
Jungles
(An Exploration of the Most Mysterious of All Natural Worlds)
Edward S. Ayensu, Editor
1980; 200 pp.

$36.50 postpaid from:
Crown Publishers
One Park Avenue South
New York, NY 10016
or Whole Earth Household Store

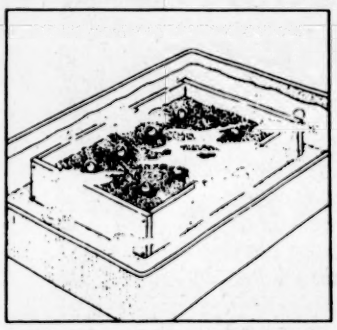


The giant flower of Rafflesia is the largest single flower known, and can be up to 3 ft. (90cm) across. It is the only visible part of a plant which is an internal parasite of the roots of jungle lianas in Southeast Asia. The flower bud arises inside the root of the host plant. It then breaks through to the outside and enlarges, finally appearing on the ground surface. The huge fleshy flowers smell of rotting meat which attracts pollinating flies — essential for the plant's reproduction, as male and female flowers are produced on different plants. Inside the fleshy fruits are tiny hard seeds.

Growing Water Plants From Seeds



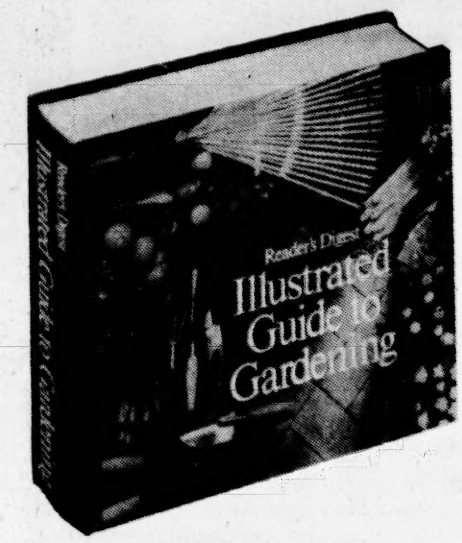
1. *Collect seeds from mature seed heads after flowering. Do not dry seeds.*



2. *Fill a tray with heavy soil. Put seeds on top. Cover with 1 in. of water.*

3. *When first true leaves appear in two or three weeks, transplant into pots.*

4. *Plant in the spring, after keeping in water in a greenhouse or cold frame.*



Reader's Digest Illustrated Guide to Gardening
Carroll C. Calkins, Editor
1978; 672 pp.
$20.50 postpaid from:
Book Department
Reader's Digest
Pleasantville, NY 11570
or Whole Earth Household Store

Reader's Digest Illustrated Guide to Gardening

Reader's Digest has trained its vast resources on gardening and produced an impressive book. The illustrations alone involved the work of 44 different artists. With captions providing step by step directions, they are frequently all that is needed for numerous how-to garden chores. And the oblong shape of the book keeps it flat and open while your hands are busy. The text explains more details than most people would have time for in a lifetime of gardening. My one reservation is the heavy reliance placed on synthetic pesticides and weedkillers — watch out here, or they will have you out there spraying everything from methoxychlor to paraquat.

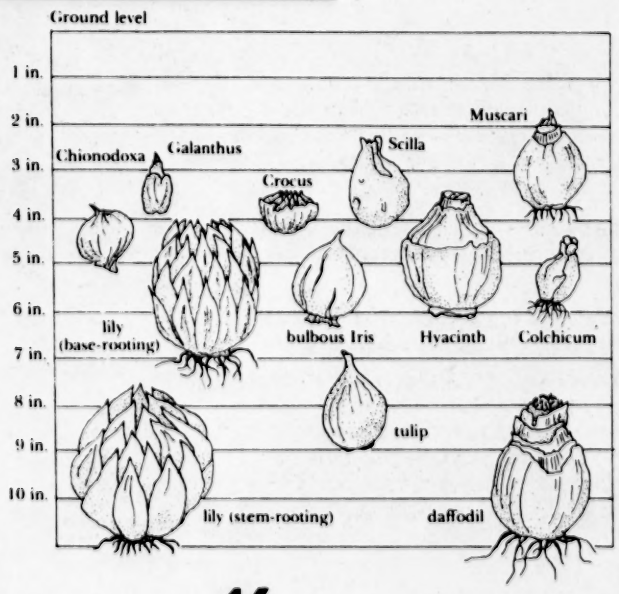
Of the gardening books reviewed here, **The Principles of Gardening** *is the most beautiful. Short on how-to and long on inspiration, its color photography is amazing. The treatment of gardening as a subject with a rich history makes it worth reading even if you never plan to garden.* **America's Garden Book** *is short on illustrations, but if you are a reader, as opposed to a browser, then it is a worthy choice. It would be just as accurate to say it doesn't need so many pictures because everything is so beautifully explained in the text. And if you are a browser from the television age, the kind who tries to get things done between commercials, then grab the* **Illustrated Guide.** *That isn't meant as a put-down, it is simply an acknowledgement of how books are designed for today's mass audience. The comment applies equally well to the two-page chapter format of* **The Principles of Gardening** *or to* **The Next Whole Earth Catalog.**

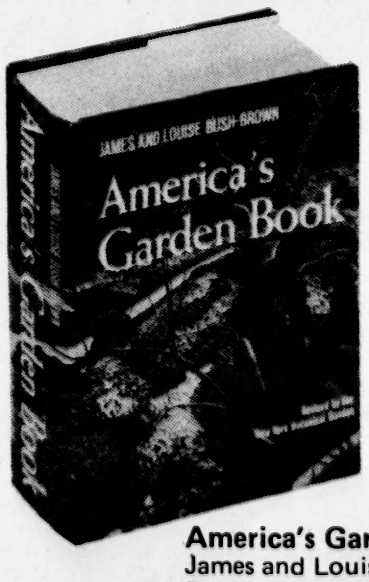
—Richard Nilsen

America's Garden Book

This book might best be described as the "joy of cooking" of horticulture. The books even look the same. It has excellent basic coverage of all the major aspects of gardening: soil; design; garden construction (i.e. walls, paths); lawns; groundcovers; vines; trees; shrubs; hedges; annuals; biennials; perennials; bulbs; coldframes and greenhouses; woodland gardens, water gardens, rock gardens; fruits and vegetables; equipment; propagation; pests; and more. There are a number of photographs and diagrams as well. For me the real contribution has been the endless comprehensive tabular lists of annuals, perennials, trees etc. that list Latin and common names, height, planting distance apart, season of bloom, color, soil requirements, author's remarks and suggestions. Invaluable in thinking about plant selection. The lists are worth buying the book for.

—Virginia Baker





America's Garden Book
James and Louise Bush-Brown and the New York Botanical Garden

Trees that will form good windbreaks

DECIDUOUS	
Acer ginnala	Amur maple
Acer negundo	box elder
Acer platanoides	Norway maple
Acer pseudoplatanus	sycamore maple
Crataegus mollis	downy hawthorn
Crataegus phaenopyrum	Washington thorn tree
Maclura pomifera	osage orange
Morus alba	white mulberry
Populus alba	white poplar
Populus balsamifera	balsam poplar
Quercus imbricaria	shingle oak
Quercus palustris	pin oak
Quercus phellos	willow oak
Rhamnus davurica	Dahurian buckthorn
Tilia spp.	linden
Ulmus pumila	Siberian elm
EVERGREEN	
Juniperus virginiana	eastern red cedar
Picea abies	Norway spruce
Picea glauca	white spruce
Pinus nigra	Austrian pine
Pinus rigida	pitch pine
Pinus strobus	eastern white pine
Pinus sylvestris	Scots pine
Pinus thunbergii	Japanese black pine
Thuja occidentalis	American arborvitae
Tsuga canadensis	Canada hemlock

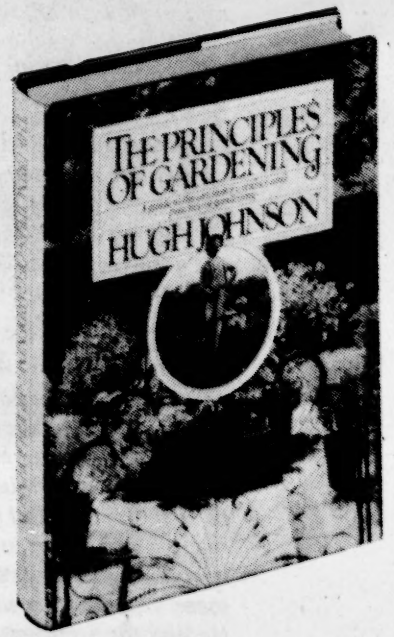
1939, 1980; 819 pp.
Third Edition
$22.50 postpaid from:
Charles Scribner's Sons
Special Sales Department
597 Fifth Avenue
New York, NY 10017
or Whole Earth Household Store

The Principles of Gardening

Hugh Johnson has been a great discovery for me. He also wrote the **International Book of Trees** *(NWEC, p. 89) and the* **World Atlas of Wine** *(1976; $8.95 postpaid, also from Simon and Schuster). This book is a brilliantly conceived collection of many two-page chapters covering every corner of gardening you could imagine. Climate and the Gardener, Living Soil, How to Look at a Plant, Weeds, Shoots into Roots, Hedges, The Early Shrubs, Roses, A Family Tree, The Early Border, The Mid-Season Border, Heaths and Heathers, The Lawn, The Kitchen Garden, Walls and Fences, Dutch Gardens, Developments in Japan, etc. Each page is about half text, and the rest a masterful combination of photographs, drawings, graphs and other visuals. Reading this book leaves you with great appreciation for the vast work Hugh Johnson has done here to produce such succinct clear summaries of each subject. And at the same time you feel his tremendous respect and and, more accurately, love for plants and the joyous role they have played in history.* —*Virginia Baker*

A tree tunnel is another old variant on a similar theme to pleaching. It is made by training cordon trees (e.g. trees with all their side branches removed) over a framework, usually of iron. Tunnels made of laburnum or wisteria form arcades of hanging flowers in spring. The leafy enclosure in summer and the powerful perspective in winter are dual pleasures.

The Principles of Gardening
(A Guide to the Art, History, Science and Practice of Gardening)
Hugh Johnson
1979; 272 pp.
$29.95 postpaid from:
Simon and Schuster
Attn: Order Department
1230 Avenue of the Americas
New York, NY 10020
or Whole Earth
Household Store



Up to the end of the seventeenth century walls were practical necessities against deer, cattle and rabbits as well as boundaries of the garden. The invention of the ha-ha or sunk fence made it possible to pretend that the whole landscape was part of the gardener's domain.

Intensive Gardening Round the Year

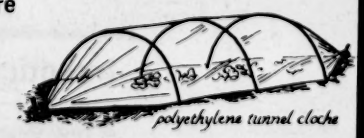
If the people of New England are ever going to stop importing so much of their produce and grow more of it themselves, this is how it will be done. The solar-powered enclosures shown stretch the spring and fall seasons and permit some hardy vegetables to grow right through the snows of winter. An excellent chapter on the history of intensive gardening reveals that these techniques are not new — merely forgotten. Photos of raised beds in Sri Lanka, and sunken beds from the southwest American Indians document a long and elegant past. The paths not taken during the era of cheap oil are numerous indeed.

There is also good information on soils and garden design and planting. The steep price for this paperback seems routine for this publisher, but the sewn binding and acid-free paper mean your money buys you a book both well written and well made. —*Richard Nilsen*

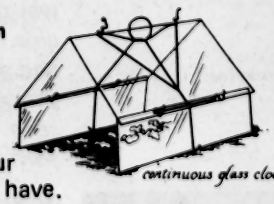
Intensive Gardening Round the Year
Paul Doscher, Timothy Fisher and Kathleen Kolb
1981; 144 pp.
$15 postpaid from:
The Stephen Greene Press
P.O. Box 1000
Fessenden Road
Brattleboro, VT 05301
or Whole Earth
Household Store

milk jug

bell jar cloche


polyethylene tunnel cloche

Cloches for getting a few weeks jump on the growing season.


continuous glass cloche

Solar Pods in the Poisson's winter garden in New Hampshire.

- It is important to note that the tighter you build your devices the more moisture problem you are likely to have. "Not-so-tight" cold frames and uninsulated devices seem to have less of a problem with fungus and mildew.
- Fall gardening under glass works much the same way as in the spring except that it requires more attention to planting dates. . . .

  In our southern New Hampshire garden we finish our fall planting around the beginning of October. . . .

  Soil preparation is relatively simple. Prepare your beds as though you were going to plant a regular summer crop, but instead of using the normal dose of fertilizer, cut it by about one-third. This is done because plants grow slower in the fall . . . excess fertilization can result in "sappy" plants, which are more susceptible to frost and cold damage than normal plants.

fiberglass cone

glass jar with bottom removed

V. Sackville-West's Garden Book

I am reading this book for the fourth time in two years. V. Sackville-West has become one of my "sheroes" for a number of reasons, the first of which is her magnificent garden Sissinghurst, where she lived for nearly forty years. Sissinghurst Castle had been standing in various forms for about 500 years when she found it, as no doubt had its gardens; but she rebuilt the gardens from scratch. **The Garden Book** *is about this garden. It is a book written especially for someone making a garden, no matter how small, with or without help. The National Trust maintains the garden since her death in 1962, but one of her sons still lives there.*

V. Sackville-West wrote a weekly gardening article for the London **Observer** *for fourteen years and built up a tremendous following in England because of her great knowledge of plants and flowers, her unusual capacity for combining utter romance and hard practical advice, and her great wit, intelligence, and independence. She traveled all over the world and brought home plants from every corner.*

Her life was as remarkable as her garden. She managed to write five hours a day in the tower surrounded by the garden. She was a poet, essayist, and wrote many books on many subjects. Her own room was in another building alongside the famous White Garden that she planted to be seen at night (all silver, white, and green plants) with many night-blooming and night-smelling flowers. Her husband, who worked in the diplomatic service, spent many hours of his time at home in the garden with her. He was the architect of the garden while she selected and planted what grew within the walkways, hedges, and walls.

She had a particular sense of adventure and daring. She was unconventional in her life, her writing, and her gardening. Color was the basis of the organization of her garden, with trees down to groundcovers in bloom in the same color range at the same time. She kept refining combinations, groupings of textures, shapes, and sizes. Plants of different cultures grew side by side. She was an admirer of Gertrude Jekyl, and before her William Robinson, who at the turn of the century moved gardening from the Victorian beds that swept across grassy lawns in shapes of ribbons and bows to simpler more straightforward collections of plants, and welcomed back cottage garden flowers, less pruning, more voluptuous, and less hampered planting.

The Garden Book *is written in twelve chapters, one for each month. She talks about her failures as well as her successes, plants she dislikes, plants she loves, plants she misses in July or December, or orders in September, and adores in June. A great book for learning, for sheer entertainment, and for endless inspiration in your own garden. You may have trouble finding some of the plants she talks about, but you will never have to worry about ending up with any oversized fluorescent geraniums!*

—Virginia Baker

V. Sackville-West's Garden Book
Philippa Nicolson, Editor
1968, 1979; 250 pp.
$8.95 postpaid from:
Atheneum Books
Charles Scribner's Sons
Special Sales Dept.
597 Fifth Avenue
New York, NY 10017
or Whole Earth
Household Store

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Trite is a sharp, unkind little word. In the dictionary definition it means "worn out by constant use; devoid of freshness or novelty; hackneyed, commonplace, stale." I must agree that we all get tired of seeing certain plants all over the place — aubretia, for instance, being allowed to blanket every so-called rock garden; and the Virginia creeper, *Ampelopsis Veitchii*, glued to red-brick houses, where its colour swears horribly with the brick when it turns to flame in autumn. Yet, could we but behold either of these for the first time, we should shout in amazement.

It is too late to hope for such an experience, but I do suggest that much can be achieved by using these poor vulgarized plants in a different way and in the right place. There is, for instance, a big silver birch of my acquaintance into which a Virginia creeper has loosely clambered. When I first saw it I couldn't think what it was. Great swags and festoons of scarlet hung in the sunlight amongst the black and silver branches of the tree, gracefully and gloriously looping from bough to bough, like something (I imagine, perhaps incorrectly) in a tropical forest, or at any rate like a stained-glass window or like glasses of wine held up to the light. It convinced me once and for all that *Ampelopsis Veitchii* should be grown *transparently*, not plastered against a wall.

Insecticidal soap

A few years ago a Canadian named Dr. George Puritch was trying to kill some woolly aphids with a new pesticide. He needed a spreading agent to apply his bug spray and grabbed some soap. To his amazement he found all the aphids in his control experiment were killed by the soap. Forgetting the pesticide, Puritch began studying soaps; he is today a world authority.

Soaps are soluble salts of fatty acids made from the oils and fats of plants and animals. They were widely used as pesticides prior to World War II and the advent of synthetic chemical poisons. They are still an old standby for the organic gardener. The difference is that most "soaps" today also contain detergents which harm plants. What Puritch did was to isolate and test hundreds of different fatty acids. About seven of them fell into the following set — they killed pest insects, they didn't harm beneficial insects like bees, ladybugs, and parasitic wasps, and they were not toxic to the plants themselves.

That's what's in this new product. It works on aphids, mealybugs, whiteflies, soft scales, true bugs, earwigs, spider mites, spittle bugs, rose slugs, and others. Of the hundreds of plants tested, the only ones it harms are nasturtiums and sweet peas (leaf burn). It works fine on normally delicate plants like African violets and ferns. Americans will notice the bottle says to use the spray on "house plants, ornamentals and in greenhouses." This warning is courtesy the EPA, which never having had anyone apply to register an insecticidal soap before, has not established any tolerances. While this bureaucratic catch-22 is being ironed out, Americans should know that the product is approved in Canada and has been used there for three years inside and out — for ornamentals and food crops.

New products to look for in the future from this company include a moss and algae killing soap for demossing roofs and cleaning algae out of greenhouses and the insides of drip irrigation systems, and a combination of the insecticidal soap with a foliar fertilizer, so you can feed your plant and kill the bugs in the same operation.

—Richard Nilsen

Insecticidal Soap
8 oz. bottle
$4.50 postpaid
Information
free

both from:
Safer Agro-Chem
3233 Vista Diego Road
Jamul, CA 92035
or ask your garden or
feed store to stock it.

Dave Wilson Nursery

Folks around here (California) buy their fruit trees from Dave Wilson. This nursery has managed the difficult task of improving their quality and service along with their size (they market over two million trees and vines a year and handle more than 200 varieties).

Of special interest to backyard fruit farmers is their long association with plant breeder Floyd Zaiger. Wilson handles the complete line of Zaiger's genetically dwarfed fruit trees — nine cultivars have been introduced so far. One unique feature this nursery provides is tailor-made climate zone information. They have broken the country down into 200 different climate zones and evaluate each of their varieties for each zone — a monumental task, but it means you know a lot more about what you are buying before you send off your money. —Richard Nilsen

←
FANTASTIC ELBERTA — Discovered by Merle Fountain as a bud sport in a Fay Elberta orchard, Fantastic Elberta offers all the proven qualities of Fay Elberta with the added benefit of showy pink double flowers in the spring. Fantastic Elberta produces large fruit, even with a heavy crop. The fruit is mild (low acid), highly flavorful, juicy, with a fine, firm texture, and is well suited to drying, canning, freezing, or fresh consumption. The fruit matures at the same time as Fay Elberta, and keeps well — several weeks in the refrigerator. Fantastic Elberta should be planted where the beautiful bloom will be a prominent part of the landscape. Plant Patent No. 3806. 25-394 $9.50 *Limit 50*

Dave Wilson Nursery
Catalog
free from:
Dave Wilson Nursery
Hughson, CA 95326

New York State Fruit Testing Cooperative Association

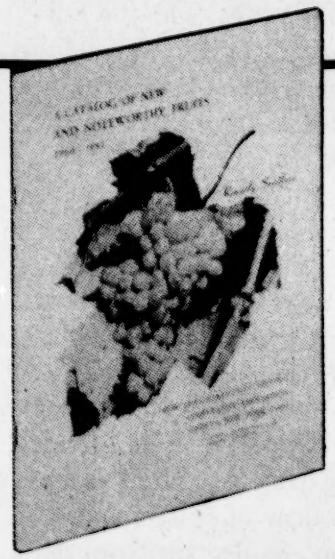
I'd like to call your attention to an unusual source of fruit trees and fruit bearing plants, the New York State Fruit Testing Cooperative Association of Geneva, New York. The Cooperative exists primarily for the purpose of testing and introducing new varieties of fruit. They work closely with state and provincial agricultural testing stations. Some of the varieties they offer are still being tested. They welcome feedback. They also have a number of older varieties, apples that you read about in nineteenth century novels, for example.

Although they must get most of their revenue from commercial growers, they are incredibly helpful to private individuals who might only want a few trees. I once asked them about European cider apples, which are not mentioned in their catalog. They sent me back a two inch stack of photocopied information and listed a number of varieties they could let me have. I may have been the only person ever to ask, but they were ready. I picked out four or five varieties and they grafted them to order for me. In spite of all the extra work and the tiny order, when they sent me the trees two years later they charged me very little more than their regular price.

Their prices are reasonable if not cheap. The quality and condition of their stock and the care of their packing are excellent. —Hendon Chubb

A Catalog of New and Noteworthy Fruits
$5 postpaid
(includes membership)

from:
New York State Fruit Testing Cooperative Association
Geneva, NY 14456



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Blueberries

01 Berkeley	04 Collins
02 Bluecrop	05 Coville
03 Blueray	06 Earliblue

1-4 @ $3.30 each — 5-9 @ $3.14 each — 10-19 @ $2.97 each — 20-49 @ $2.31 each — 50-99 @ $1.98 each — 100 up @ $1.65 each

●
Old Apples

The Association has received many requests for trees of the old time apple varieties. Following are brief descriptions of some of these varieties. They have been propagated on semi-dwarfing rootstocks and are available from the Association. The varieties are listed in order of of ripening.

COX ORANGE — October 15 — Most important variety in England. Medium size. Rather dull finish. Flesh firm, aromatic, distinctive flavor. Excellent dessert quality. . . .

ROXBURY RUSSET — October 15 — Very old, originated about 1649. Greenish to yellowish-brown russet. Sprightly flavor, good quality. Good storage life. . . .

GOLDEN RUSSET — November 1 — One of the best varieties to blend in cider. Long storage life. Medium size. Flesh fine-grained, yellowish, crisp. Skin color brownish, russeted.

Southwest Traditional Crop Conservancy Garden and Seed Bank

Bioregional muscle at its best. Seeds are collected from the Puebloan peoples of the Colorado Plateau, Papago/Pima and Tarahumara-Yaqui peoples of Sonora and the Chihuahuan uplands and stored and distributed primarily to the poor, particularly native Americans, who wish to grow them. Secondarily they are available to anyone in New Mexico, Arizona, Mexico, or Southern California who wishes to help save these rare varieties for future generations and grow crops better adapted to living-in-place. The Bank includes red dye amaranth, Hopi cotton, ceremonial tobacco, chia, and l'itoi's onion. Also available are publications by Meals for Millions (the sponsoring foundation). I especially recommend those on seedbanking from the deft spiritual-seed-warrior Gary Nabhan. —Peter Warshall

Seed Sources and Resources
Catalog and report
$1 from:

SouthWest Traditional Crop Conservancy
Garden and Seed Bank
715 North Park Avenue
Tucson, AZ 85719

POND SCULPTURE

Text and photos ***by Tim Matson***

I DISCOVERED THE ART of pond sculpture by a fluke. A decade ago I was on the lookout for a small farm in Orange County, Vermont, in cahoots with my sweetheart who had joined me packing for the hills. On one rickety farm we found an old earth pond. I wasn't able to get near it because I was on crutches after a skiing crackup, and Diana couldn't see much under three feet of snow. But I figured the pond would provide good therapy for my leg, and she was half fish at least. So we handed our savings over.

My cast came off in the spring after the snowmelt, and I felt strong enough for swimming. Alas, I found the pond in need of restoration. It had dehydrated since the pipe that fed it stream water clogged. So over the next couple of years I tended the pond and swam my leg back into good shape. I reestablished the smooth flow of stream water, cleared the plugged spillway, hauled silt from the delta where inflow entered the basin, and stocked the pond with rainbow trout. I set up a gravity feed watering hose from the pond downhill to the barn and garden, and for Christmas I built a redwood sauna close to the shore to enable us to stretch the swimming season full-length between freeze up and thaw. That was the beginning of my romance with ponds.

Naturally, according to the law of thermodynamics, something had to give. It turned out to be Diana. We sold the farm, split up the trout, and rambled off to chase our different fates.

Now, seven years down the road, I live in a homemade cabin overlooking a quarter-acre apple green pond that I sited and cleared and carved in collaboration with a bulldozer sculptor. Happily, not long ago I hooked a mountain mermaid. Together we cultivate most of our own food and collect all our firewood and lumber, with some surplus left over to barter with neighbors in the hills. Trout fatten in the pond, and surplus water gravity feeds a rich market garden and a winter pig. Long range pond schemes include a firefighter's pump, a small hydro generator, and a wood fired sauna. Our holding will swell with pond power.

Beyond this I've found a new dimension in the pleasures of pondmaking. Of all the bucolic arts and husbandries, pondmaking alone seems to balance the forces that animate the land – nature and man. You can carve a pond and step back, as people have done since the beginning of history, and the pond comes alive. More than a thousand years ago the Chinese poet Han Yu wrote

> Does the bowl
> in the garden
> mock nature
> when night after night
> green frogs gather
> to prove it's a pool?
>
> Who says
> you can't make a pond
> out of a bowl?

Pondmaking was sacred Eastern tradition. Monks carved ponds beside their temples and shrines to mirror the universe. These shining objects of concentration distilled the Buddha's message. Reflected in the water the moon was pure illusion, empty form. There was nothing to discover but the nature of mind. In the West pondmaking was first celebrated in 1559 when Janus Dubravius, Bishop of Bohemia, published **A New Booke of Good Husbandry**. His intention was to reveal "the secret commodities in making fish ponds, and furnishing the same." Yet despite all the practical advantages of earth ponds Dubravius had to confess, "In our country of ponds . . . it may appear that fish with their ponds were instruments

---

Tim Matson's photography illuminates ***Pilobolus****, a book from Random House on the remarkable dance company by that name. In due course his book on a slower form of dance, pondmaking, will be published by the Countryman Press (Woodstock, Vermont).*

Often states, counties and provinces (Canada) will give assistance – informational and sometimes even financial – to pondmakers. *–SB*

more to feed the eyes than for sustenance or food." Thoreau's **Walden** was a later tribute to ponds as objects of contemplation.

If earth ponds stimulate such rich visions – and harvests – can't pondmaking be seen as an art? (A little Buddhist simplicity wouldn't hurt a bit either.) I didn't appreciate this until I had built my own pond and labored on several others. Then, after watching three ponds empty through faulty spillway piping, and comparing my $850 quarter-acre reservoir with half a dozen $6000 ponds of similar capacity, I could see why the rate of contemporary pondmaking was not rising along with the opportunities for low-cost aquaculture.

An aesthetic independence is needed to balance the super-pond mentality of conservation agencies and contractors. Otherwise too many new ponds will wind up in impossible sites with earth embankments sticking up like sore thumbs, pierced with superfluous piping dripping inside and out. Recently one of our county's best pond builders went broke. "Not enough business," he said. "Who can afford it?" At six thousand bucks, few indeed.

But I have thriftier visions – a patchwork sea of homemade pond sculptures across the land. □

HERE pondmaker Ray Uline begins to carve out a quarter-acre reservoir in Lyme, New Hampshire, with his pet seven-ton Cat. "She's a good ol' gal," says Ray. "Hardly ever gets stuck, long as you mind what you're doing." Working in the spring fed sidehill hollow, he uses the solo bulldozer to chisel the pond from site clearing through final landscaping. In classic hill country style he takes up the earth excavated from the basin to make the embankment for this dug-and-dammed impoundment.

As Ray shapes the dam on the downhill side of the site, he keeps a drainage ditch open in the center. Thus watershed runoff and spring flow stream out of the excavation, keeping the muddy basin firm enough to support the bulldozer. No precious time is lost hauling the machine out of the muck. *[more →]*

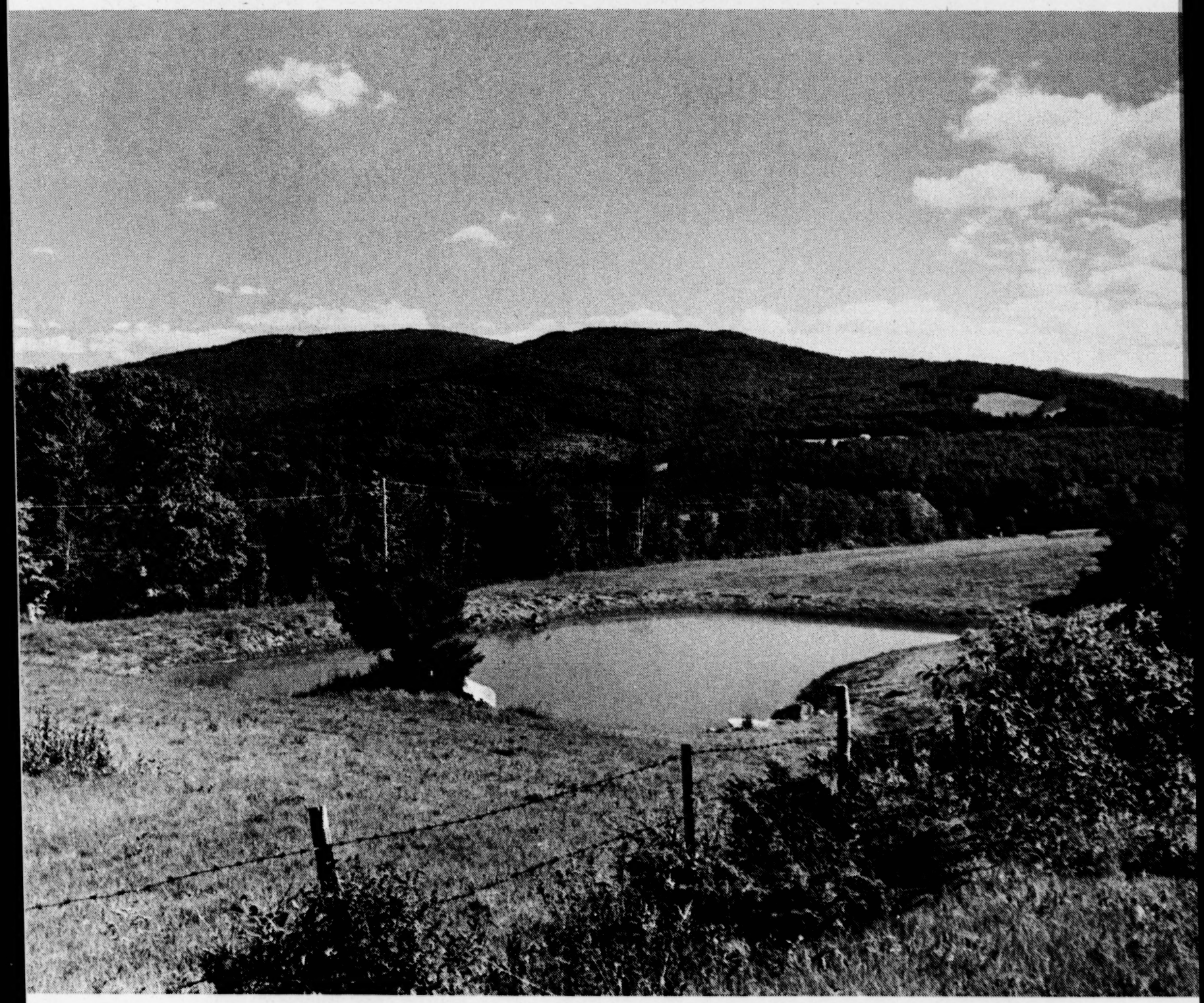
SCRAPING bottom in the pond basin Ray searches for flaws in the earth seal – clusters of pervious stone or gravel that would be the source of potential leaks. He carves out these patches and substitutes watertight soil. A good seal is the best defense against seepage. Pondmakers who claim they can waterproof impossible sites with chemical additives and underwater dynamite blasts should be run out of town.

Like a potter's bowl, the earth pond is molded with a blend of materials. In addition to drawing a sufficient supply of water, this site consists of good watertight soil; about 10 to 20 percent clay, and an even mix of silt, sand, and gravel. Preliminary test holes in the pond basin are crucial in evaluating the worthiness of a site.

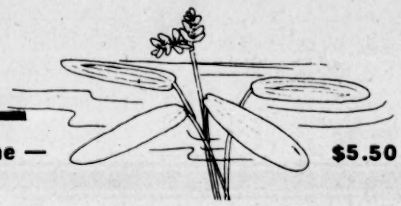
LIKE a sculptor driving a roaring six-foot chisel, Ray rides above his giant blade filling in the drainage ditch and shaping the slope of the earth embankment. "My ponds have lots of character," he says. "I give them a special curve." To prevent the dam from eroding, Ray abides by a cardinal rule of pondmaking: Bank the dam no steeper than 3:1.

Throughout the foundation of the dam, topsoil, stumps, and roots have been cleared to help the embankment adhere to the ground. Then as the rim of the pond is raised, the weight of the bulldozer packs the earth, making the enclosure watertight. Here at the north end of the dam, Ray uses his blade like a trowel to seal the butt joint that splices the embankment to the hillside. This seam usually makes the best site for the earth spillway, since the slope provides a natural stronghold against erosion. An overland spillway is preferable to underground plumbing, which can double the cost of a pond this size, and leak to boot.

HOLDING water after a storm the pond shows an early sign of success. Later, after it has filled and the silty water cleared, brook trout will be stocked. They should find shade and shelter under the twin boulders that Ray saddled on the shoreline. And with some luck the trout will spawn their eggs in the gravel bed that he carefully spread over the incoming spring channel. While Ray finishes up the dam, a young neighbor tests the water.



CLOUD in the ground, the newborn pond will work wonders for its owners who plan to build a house overlooking the water. Cool swimming holes inspire hot summer carpenters, as well as storing water for mortar mixing, gardening, and chilling homebrew. For settlers pond sculpture often precedes ground breaking for a home. And for gamblers, a note: According to a rough rule of thumb the value of a finished pond is triple its construction cost. ■



Winter Blooming Water Hawthorne —

$5.50 each

Van Ness Water Gardens

Van Ness' supplies are for garden ponds rather than rural. The specialty here is water lilies, but this company also sells bog plants, grasses, fish food, aquatic snails, pumps, filters and fountains. Since water gardening involves some added techniques, they have wisely included information on how to build small ponds and what to stock them with so the ecosystem stays balanced and the water stays clear. —*Richard Nilsen*

Water Visions
(The Complete Guide to Water Gardening) Catalog

$1 from:
Van Ness Water Gardens
2460 North Euclid Ave.
Upland, CA 91786

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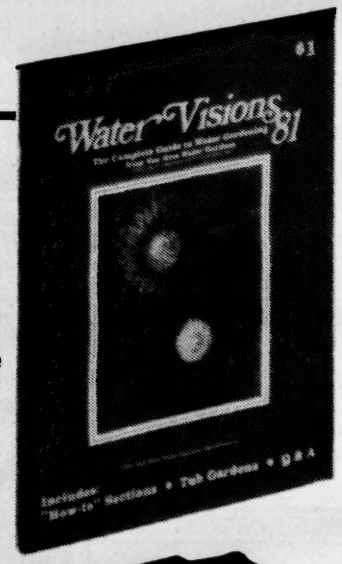
The shallowest underwater light available with full 250 Watt Tungsten Halogen lamp will light up the whole pool. Constructed of brass and stainless steel with heavy base to bottom of pool. Total height of light is only 5 inches. May be used in pools of only 6 inches or more of depth. Available in Amber, Red, Green, Blue and Clear. Specify Color.
S072P — $123.95 postpaid

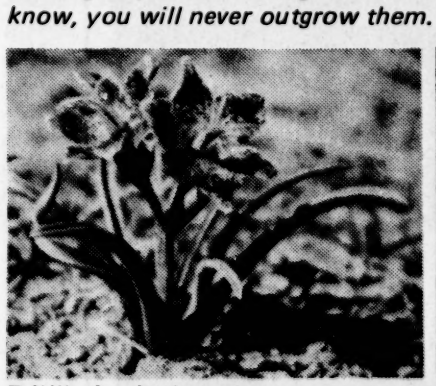


Wildflowers of the United States

This must be about the most beautiful set of wildflower books ever published. They are printed on high quality paper with exceptionally good color photographs of literally thousands of wildflowers, most of which are shown in their native habitats. It explains botanical terms in language laymen can understand, and lists both Latin and English names.

Volumes 1 through 5 include wildflowers east of the central mountains and plains, while Volume 6 in three books (Part I, II, and III) includes California wildflowers. Since Volume 6 costs about $85, I have only that one. Each of the other volumes is about $80. Buy the one you need or one a year.

This three-part volume is divided into fourteen groups, each composed of different plant families. The text and photographs are both accurate and well produced. These books give you the feeling that no matter how much you know, you will never outgrow them. —*Virginia Baker*

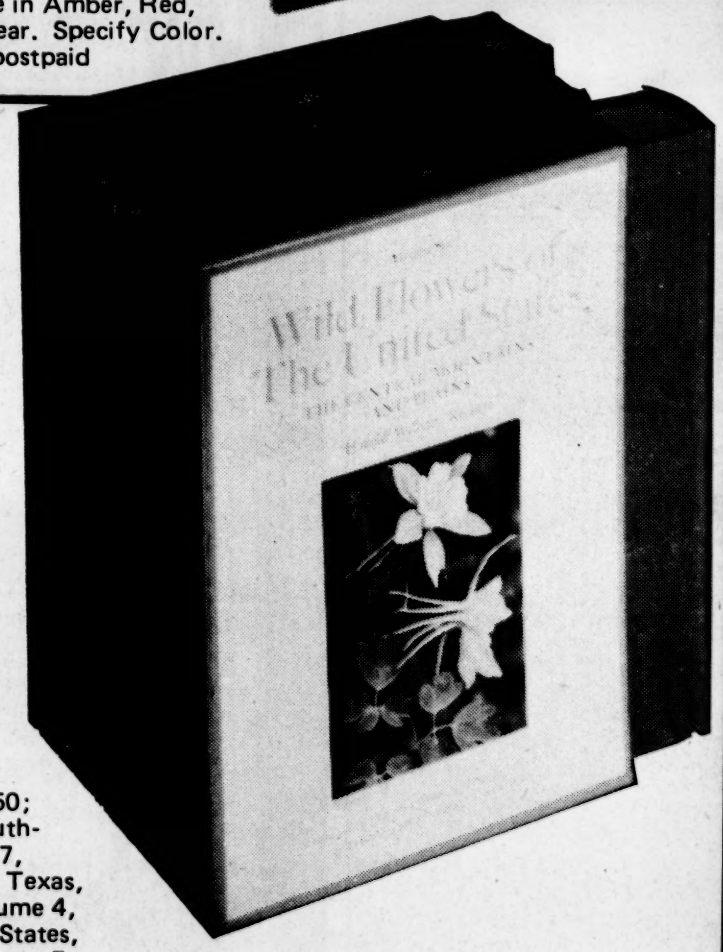


Fritillaria pinetorum

Lillium umbellatum

Fritillaria recurva

Wildflowers of the United States
Harold William Rickett
Volume 1, The Northeastern States, 1966, $69.50; Volume 2, The Southeastern States, 1967, $79.50; Volume 3, Texas, 1969, $79.50; Volume 4, The Southwestern States, 1970, $89.50; Volume 5, The Northwestern States, 1971, $79.50; Volume 6, The Central Mountains and Plains, 1973, Three books, $84.50; Index to all volumes, 1975, $36.50.



all from:
McGraw-Hill Book Co.
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Hightstown, NJ 08520
or Whole Earth Household Store

Cannibalistic industrialized pigs

Dear Anne Herbert,

The following information (obscure, but wallowing in significance) was prompted by Frank Snider's porcellian researches. ("Pig!", Winter 1980 CQ.)

As Scandinavian pigs are increasingly subjected to factory farming, the "rational" diet and concentration camp environment of the modern pig farm have led to some nasty developments in the modern pig.

In Denmark, where the bulk of Europe's bacon is raised, most pigs are now fed the dried and powdered waste products — eyes, nostrils, and genitals — of previous pigs. While this diet is ideal for agribusiness economics, it has had unexpected side effects on the pigs. The chemicals and growth hormones with which the pigs are dosed become increasingly concentrated in the flesh of succeeding generations, with unknown but you-don't-have-to-be-clairvoyant-to-guess effects on bacon eating humans. The effect on the pigs has been a steady increase in cannibalism. Even without an apparent reason (such as late feeding) a herd of pigs can squeal themselves up to a frenzy and suddenly attack the weakest, eating it alive.

Faced with mounting protests from pig farmers, scientists from the feed corporations developed a bizarre remedy: an aerosol deodorant the farmer can spray on his pigs so that they no longer smell piggy to each other. This wonder of modern science is called — wait for it — " "America" brand hog deodorant. Remember that when bringing home your bacon.

Ex-patriotly yours,

Gordon Crammer
Markhus, Norway

← **A glimpse of a kinder time.**

ANCIENT WOODLAND

A woodland scene attributed to Simon Benninck, the late-medieval Flemish artist (c. 1500). The figures are somewhat conventionalized but the scenery is probably the most convincing picture of the interior of a wood ever painted. It is recognizable as a limewood. The underwood in the foreground was felled last year, leaving standing most of the scattered and variable timber trees (standards) of elm and oak. The felled stools are sprouting to form the next underwood crop; among them are 'coppicing plants' which include broom, male-fern, bramble, and the honeysuckle *Lonicera xylosteum*. The toadstool *Oudemansiella radicata* is parasitizing the roots of an elm. In the background tall lime underwood on big stools awaits the next felling.

The one good system for combining the production of sawtimber and smallwood

COPPICING-WITH-STANDARDS

by Philip Stewart

In **The Next Whole Earth Catalog** *(p. 84) we enthused in some detail about coppicing as a highly efficient source of firewood. The technique, practiced for centuries everywhere else but America, involves frequent recutting of trees or shrubs that regrow rapidly from the cut stumps, taking full advantage of the large root systems left under the stumps.*

This article explores the somewhat-less-ancient, somewhat-more-sophisticated technique of coppicing with standards, by which you let some trees grow to maturity and thus add sawlogs to your product. Author Philip Stewart is a forester with the Commonwealth Forestry Institute, Oxford University, England. The article is adapted by the author from one he printed in the **Commonwealth Forestry Review,** *volume 59 (1980).*

Ancient Woodland *by Oliver Rackham (1980, Edward Arnold, England) is the source of our illustrations and captions except for the drawing by Philip Stewart and Don Ryan. Oliver Rackham says that one by-product of coppicing is a spectacular increase in Spring flowers.*

—SB

IN FORMER TIMES that which came from the ancients was thought to be best, but modern people seem to prefer whatever is new. Neither assumption is very helpful for sorting out the good from the bad (though that which is old has the advantage of proven ability to survive), so the safest procedure is to judge everything on its merits. The present article sets out to show that the ancient silvicultural system of coppice-with-standards has virtues that have been unwisely forgotten, and that it deserves to be revived. Indeed, if it did not already exist, now would be the time to invent it.

Coppice-with-standards may claim to be the oldest of all deliberately adopted systems of forest treatment, for simple coppice is merely what happens in appropriate circumstances if woods are repeatedly cut, and high-forest systems, in

A coppicing scene in the Bradfield Woods near Bury St. Edmund's. The wood consists of underwood, of a great variety of species, with scattered standards of oak and ash. In the foreground the underwood has just been felled to produce the poles which form the principal crop, leaving the timber trees standing. Note that several poles have been cut from each underwood stool. On the left is an area which was felled a year ago and in which, without further treatment, the underwood has grown up to be now five to six feet high. In the background the underwood has grown up about fifteen years and is ready to be cut again. Such a scene has been repeated on this site every few years since at least the thirteenth century. The only serious anachronism in this picture is the bonfire, consuming *spray* and *brushwood* — the tops and branches of underwood poles — which would formerly have been taken away and put to use.

which re-seeding is deliberately ensured, are relatively recent. The practice of reserving, or "storing," a certain number of trees – the standards – to grow on to maturity when the rest are coppiced, goes back to the European Middle Ages. It is said to have been practised from the 7th century in Germany and since the 12th century on one estate in England. In 1543 Henry VIII made it a statutory obligation to leave twelve standards per acre. The object was to obtain both large and small stems from the same piece of land. The system spread throughout Western Europe and, until quite recently, it was at least as important as high-forest systems. As late as the 1920s one third of all French forests – half the broad-leaved woodlands – were managed in this way.

In the fully developed system the standards, or overwood, may be of a different species from the coppice, or underwood, and they are usually grown from seed cast by previous generations of standards. If there are insufficient seedlings, good coppice shoots may be adopted as standards, but they usually develop a more or less defective butt log and may also suffer from disease entering through the old stump, so it is preferable to make good the shortfall by planting standards. Some standards are cut and new ones reserved at each cutting-over of the coppice, so that their ages are all approximate multiples of the felling cycle. European languages have picturesque terms to refer to these different age – or size – classes. In English they are called, in order of increasing size; teller, standard (second class), standard (first class), veteran. In French there is a name for a fifth size class, which can be translated "oldbark."

In coppice-with-standards the diversity of species and of ages makes for a rich animal and bird population, for all types of woodland habitat are represented in close proximity.

Most existing coppice-with-standards is centuries old and derives originally from natural forest. There are often several species both of coppice and of standards, stabilized by semi-natural selection, with some overlap between the two sets of species. Little is known about the artificial establishment of coppice-with-standards, but this appears to be what is done in the Republic of Korea under the name of the *sunchon* method: timber species are planted in rows separated by rows of leguminous species for firewood coppice.

Woods managed as coppice-with-standards are strikingly different from either even-aged or selection forest. Large well-spaced trees dominate the dense underwood. Here and there the underwood is absent or much reduced after a recent felling, but there are no clear-felled areas. The diversity both of species and of ages makes for a rich animal and bird population, for all types of woodland habitat are represented in close proximity. It seems to be generally agreed that the effect is aesthetically more attractive than that of either simple coppice or even-aged high-forest.

There are just two conditions for choosing this system: a dense enough human population to make silviculture possible and desirable, and a demand for small logs and poles either for rustic construction or for fuel. Absence of the first condition in the early days of colonization meant that the system was never adopted in North America. The disappearance of the second condition in Europe over the last century has led to the system being abandoned in its place of origin, and interest has centered on methods of converting from it to high-forest. There are now few places in Europe where it can still be seen in full operation, and it receives little or no attention in most textbooks and forestry courses. Forest historians have shown interest in the subject, but there has been virtually no modern work on developing and adapting the system. Seemingly, coppice-with-standards is about as live a topic as keep-and-bailey castles.

Times have changed and the two conditions for choosing coppice-with-standards are present again in many places. Few countries are now so sparsely peopled that they can manage without silviculture, and the rising price of alternatives makes fuelwood and poles a good buy again. Indeed, both conditions have been present all along in many of the poorer countries, but the prestige of modern Western techniques prevented foresters from making much use of coppice-with-standards in the tropics. It is time now to look again at the one good system for combining the production of sawtimber and smallwood. We know that it works, for it has lasted at least seven centuries, and we know it is practical, for generations of European peasants operated it long before forestry faculties were opened.

It may be argued that it is simpler and more efficient to separate the two forms of production, setting up high-forest plantations to produce sawlogs and simple coppice to yield fuelwood and poles. However, most such plantations are subject to clear felling, the effects of which on the soil can be detrimental, especially in the tropics.

They are also usually monocultures, which in the case of many species leads to reduction of the soil flora and fauna. Simple coppice moreover tends to impoverish the soil by requiring the produce to be removed in the form of young nutrient-rich stems, though this loss can be minimized by trimming and debarking the wood where it is felled. It is thus possible that in the long term coppice-with-standards, by protecting the soil, will prove more productive than separate blocks of high-forest and simple coppice occupying an equivalent area. Even in the short term the system may be more productive, where the

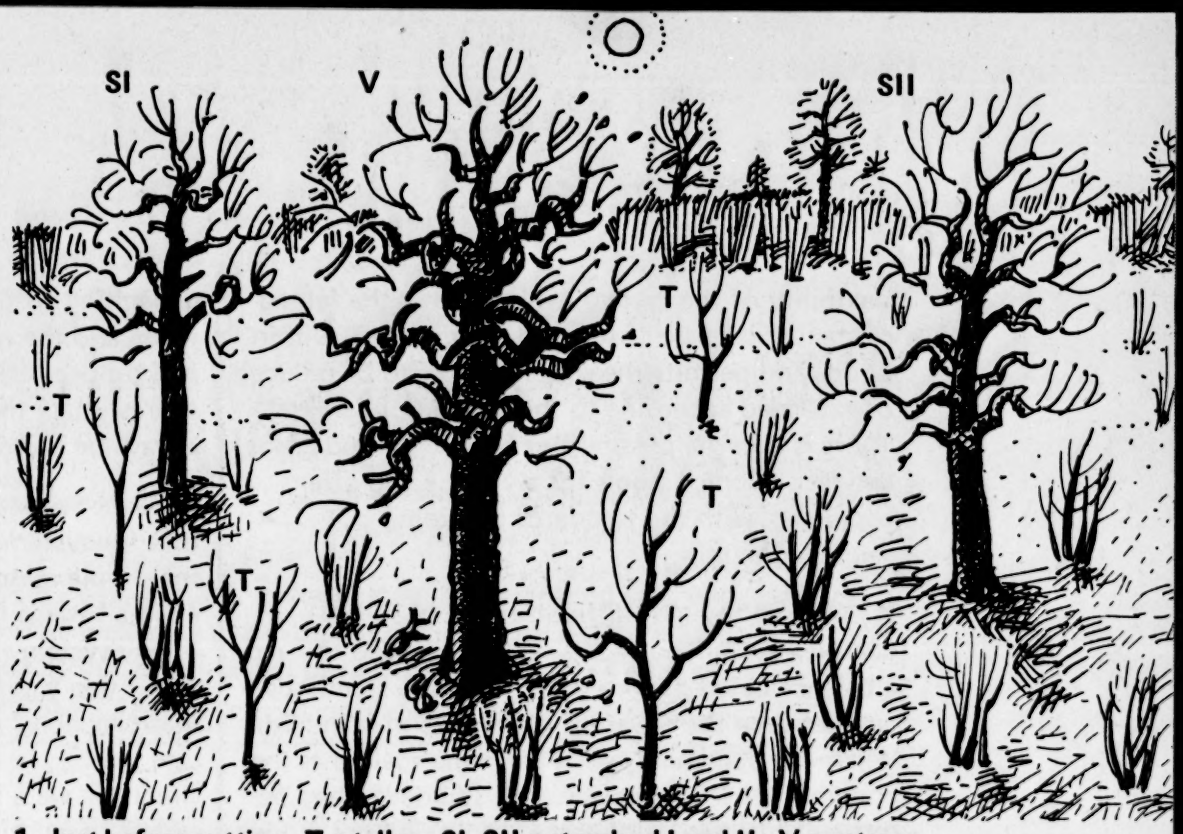
Where reforestation is financed by a private owner or by a small community, the early returns from coppice produce may be the factor that makes it possible to wait for the timber to grow.

overwood and underwood species exploit different levels of the soil, have different nutrient requirements, or grow at different times of the year.

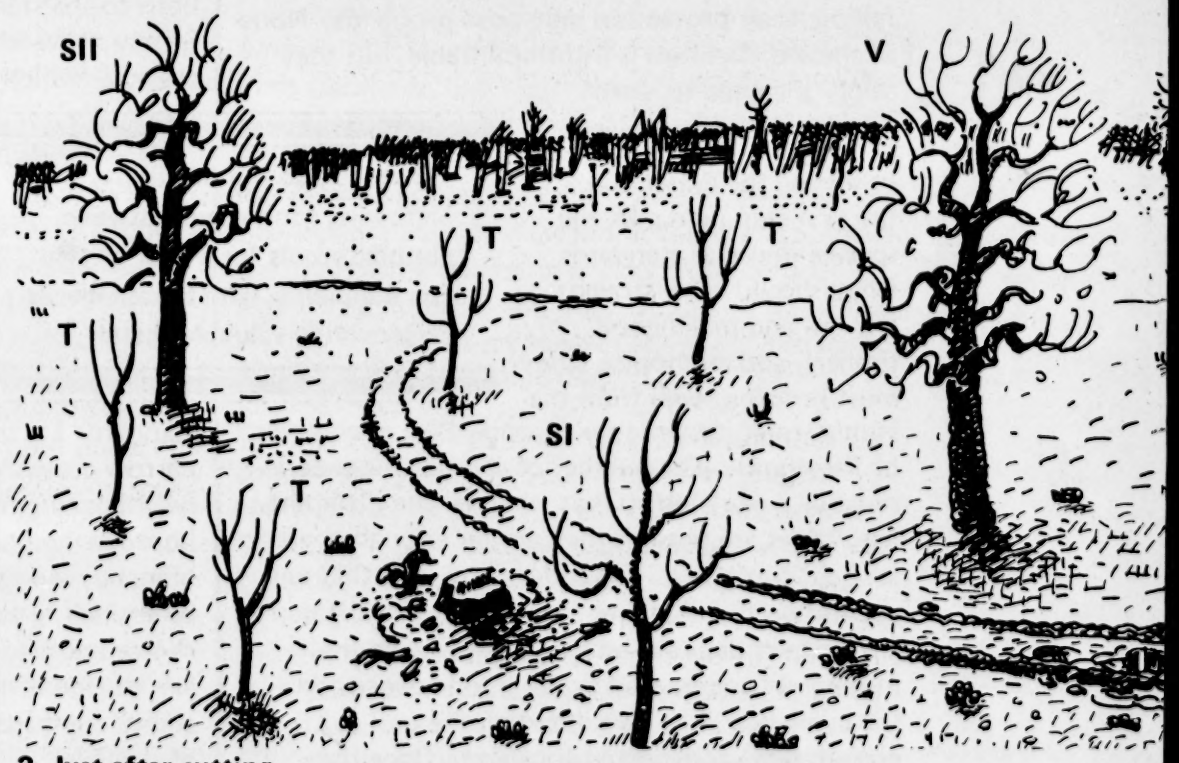
Whatever the biological arguments, there are important economic and social advantages. Coppice-with-standards lends itself to the small scale of operations appropriate for supplying local needs, and it could also conciliate the conflicting interests of rural and urban users, inducing communities to undertake forestry capable of satisfying both markets. Where reforestation is financed by a private owner or by a small community, the early returns from coppice produce may be the factor that makes it possible to wait for the timber to grow. Such owners can also benefit from the

BOX 428 SAUSALITO CA 94966

DONALD RYAN



1. Just before cutting. T = teller; SI, SII = standard I and II; V = veteran



2. Just after cutting.

3. Just before cutting again.

flexibility of the system, which allows the felling of standards to be postponed or advanced, within limits, and permits the coppice cycle to be reduced or extended according to the pattern of demand. There is also the possibility of growing food crops between coppice stools for a year or two after coppicing, with the standards providing valuable shelter.

It might be thought difficult to apply such a complex system correctly. Skill is needed to keep a balance between the coppice and the standards and between the different age classes of standards. Where the standards are of the same species as the coppice, the selection of future standards may be difficult for reasons of access and visibility, and it has to be carried out before the coppice is felled. Where standards are planted after a coppice felling, their protection may pose problems. None of these difficulties is insurmountable, but they imply the need to learn a craft in the early years.

In setting the system up, the first step is to pick the species to use as standards (they should grow straight and tall and make good timber), and as coppice (they must re-sprout well from the stump, tolerate some shade, and make good poles or firewood). The number of standards per acre must be calculated so that when all the different age classes are present they are far enough apart to let light through to the underwood, and that will depend on the diameter of the crown at different ages, which depends on the species. And the number of underwood cycles in one overwood life cycle has to be calculated on the basis of their growth rates and desired final size. Once the system is in full operation it becomes much easier; at each cutting-over you reserve enough new standards to replace the old ones that you fell.

Working out the system may not need an expert. The key factor for the spacing of the standards is the so-called "crown-diameter ratio." For each species of tree there is a constant relationship between the horizontal diameter of the crown and the diameter of the trunk at breast height, provided the tree has grown free-standing, without neighbouring trees to make it narrow its crown. If you can find a few isolated trees of the species you want for standards and measure their crown-diameter ratio, this together with a ring count showing the trunk-diameter at different ages gives you the information needed to find how much of the area will be taken up by a given number of standards of each age. The target value should be between one third and two thirds of the area, depending on the shade tolerance of the underwood and the respective quantities of smallwood and timber desired. If in doubt it is better to overestimate the number of standards; they can always be thinned out later.

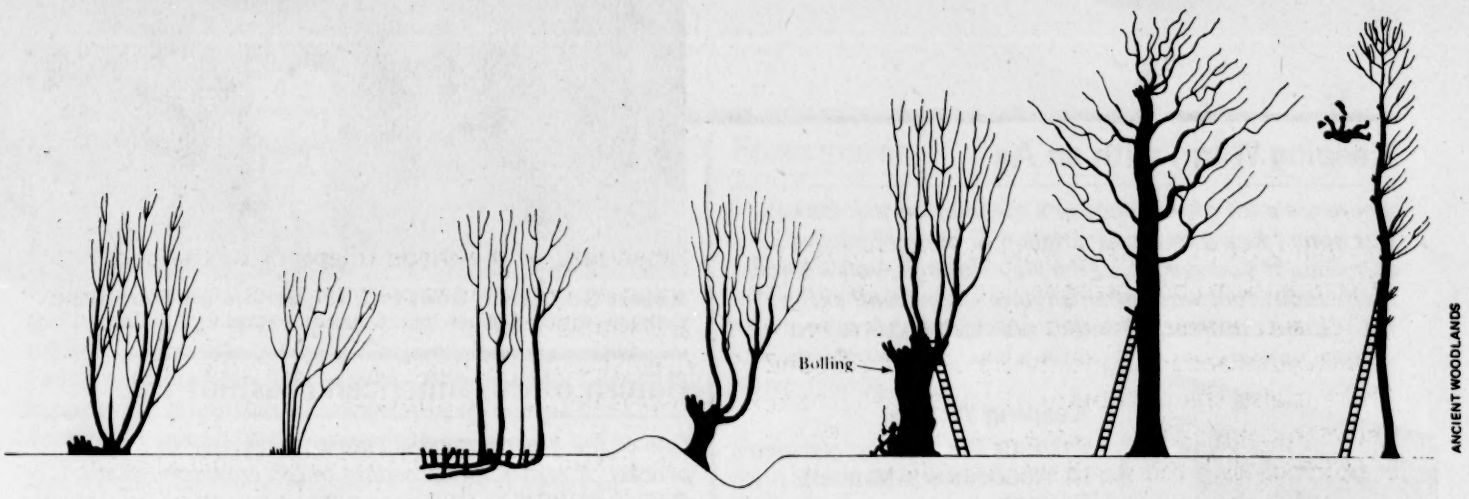
The labour requirement is high compared with that for systems that produce only large logs, for the simple reason that it takes longer to cut a lot of small stems than one big one. But that is true of any system that produces firewood and poles, and if you want to split large logs into firewood that probably takes at least as much work. In any case, perhaps we are moving out of the age in which we were ruled by the dogma that work is an evil to be minimized.

Silviculturally, the system is said to be detrimental both to the standards and to the coppice. The former grow with short boles and large, branchy crowns, (which may be an advantage, for example in reducing the growth stresses in certain eucalypts) while the latter is less vigorous than simple coppice. These however are not general features of the system but depend very much on the species and techniques used. The best genotypes for use as standards are those that grow straight, tall and narrow-crowned even when not forced up by neighbouring trees. High pruning may be used to improve the bole of species that tend to be too branchy, though shade from the underwood may be enough to ensure clean boles. Appropriate choice and treatment of the standards reduce the loss of vigour in the coppice, which in any case is amply compensated by the added production of sawlogs.

There is also the possibility of growing food crops between coppice stools for a year or two after coppicing, with the standards providing valuable shelter.

Certain dangers threaten woodlands managed under the system. As with simple coppice, browsing by wild animals or by uncontrolled domestic animals can do considerable damage at almost any time in the life cycle of the forest. The standards may suffer from wind or snow when they are first liberated by the cutting of the surrounding coppice, and certain species are liable to sun scorch if their smooth, thin bark is exposed too much. By allowing the soil to dry out in a period of drought, felling of the coppice may also cause the standards to suffer more than the trees in high forest. Appropriate choice of species and of felling and pruning times may diminish or eliminate these risks. They should also be compared with the risks from pests and diseases in monoculture and with the risks to the soil in clear felling.

Coppice-with-standards is not just a system for



Methods of producing wood from trees. Left to right: coppice stool above ground (e.g. ash); coppice stool below ground (e.g. hazel); clone of suckers (e.g. elm); stub on boundary-bank; pollard; high pollard; shredded tree. The left-hand half of each has just been cut; the right-hand half is fully regenerated and is about to be cut again.

temperate countries. It has been used in the Mediterranean zone of Europe and in subtropical and tropical climates in India and East Africa, where it was introduced by the colonial forest service. Among the chief standards in India are *Tectona grandis* (teak) and above all *Shorea robusta* (sal). The treatment of sal is particularly interesting, for in some regions it is used partly to protect the coppice from frost damage. This requires at least 40 standards per acre in the early years, but as they grow they have to be thinned – a practice little known in Europe. Teak also makes an excellent standard, but it may need to be used with coppice of another species, for teak coppice does not always tolerate shade. In East Africa some eucalyptus plantations were managed under the system with the same species in both underwood and overwood.

A combination that does not appear to have been tried often under any climate is that of broad-leaved – perhaps leguminous – coppice with coniferous standards. Broad-leaved standards of most species tend to suffer from the defects of short bole and branchy crown. The straight habit of most conifers makes them more likely to reproduce high quality sawtimber when grown widely spaced, and their narrow crowns and often light shade make for favourable conditions for the understorey. The presence of broad-leaved coppice beneath should avoid the soil problems created by the indigestibility and slow decomposition of most coniferous litter. With leguminous coppice species for nitrogen fixation there is still greater potential gain in soil productivity.

The textbooks mention only one example of coppice with coniferous standards: Aleppo pine above evergreen oak on dry limestone sites in Southern France. Another temperate example is found in Korea where pine standards are planted with *Robinia* (black locust). There should be great scope for developing combinations of conifers and legumes. A particularly promising standard is larch with its light, deciduous foliage, and its wide spacing.

It is even possible to imagine using broad-leaved standards with coniferous coppice, if not a purely coniferous combination. Certain conifers coppice well, notably *Tetraclinis* from North Africa, *Cunninghamia* from China, and certain species of *Juniper.* These would not tolerate much shade from standards, but I have seen *Tetraclinis* vigorous under a light cover of eucalyptus in Algeria and would not rule out its possible use. For temperate countries the redwood, *Sequoia*, is a candidate, and some estates in Great Britain have been coppicing it experimentally. Coniferous coppice could be an admirable source of pulpwood, though the species mentioned above are also appropriate for more exacting uses.

There are thus many reasons for believing that coppice-with-standards could make a valuable contribution to forestry. The immediate need is for research into the best combinations of species, into their productivity, into their effects on the soil, and into the details of management techniques such as optimum density of standards per acre, felling cycles and rotations, and high pruning and wood quality of standards. But the search for solutions does not need to be the monopoly of scientific institutions. Coppice-with-standards was invented and perfected by ordinary people. Perhaps it is time for silviculture to turn back into a folk craft. ■

Useful Sources

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National Academy of Science, 1979; **Tropical Legumes**. N.A.S., Washington DC.

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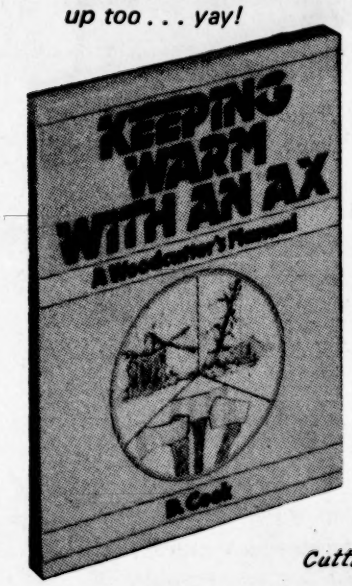
Troup, R.S., 1952; **Silvicultural Systems** (2nd Edition), Oxford University Press.

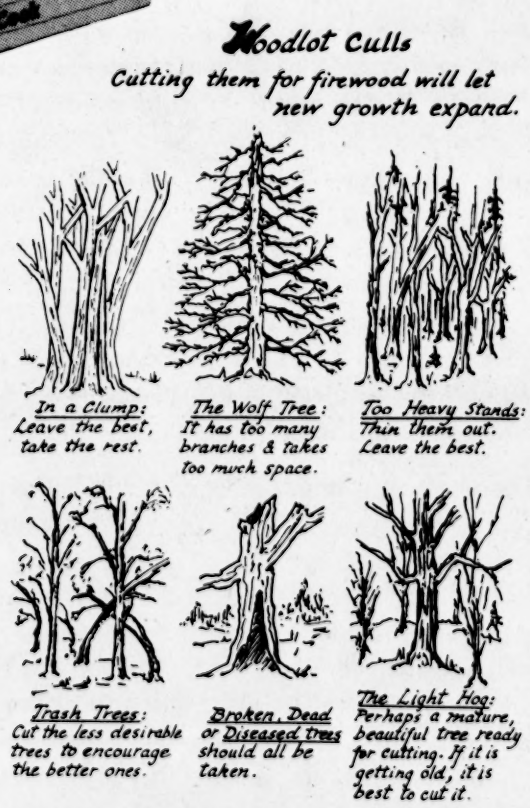
Rackham, Oliver, 1980; **Ancient Woodland** (Its History, Vegetation and Uses in England); Edward Arnold, London (used for some illustrations for this article).

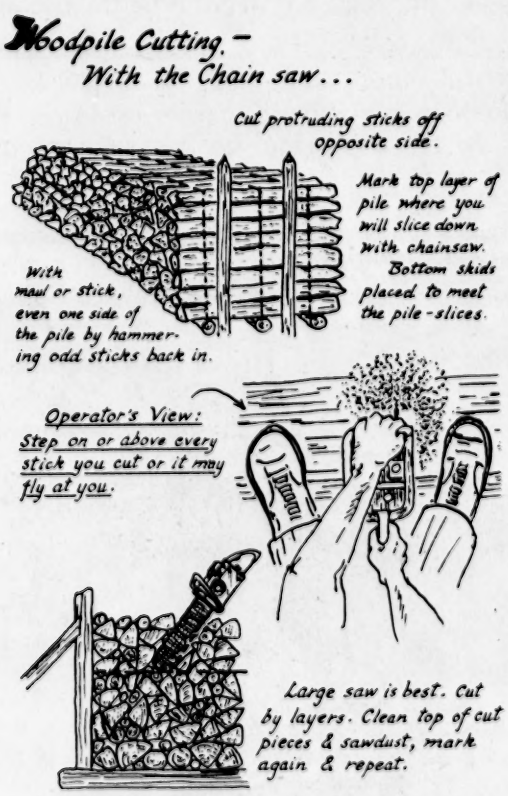
Keeping Warm with an Ax

There are a lot of woodcutter's manuals on the market, but none I know of are as detailed or comprehensive as this one. If you read it all the way through, you'll know more about fuel wood than anyone else around except that fabled oldtimer. Woodlot management is talked up too . . . yay! —J. Baldwin



Keeping Warm with an Ax
(A Woodcutter's Manual)
D. Cook
1981; 139 pp.
$6.50 postpaid from:
Universe Books
381 Park Avenue South
New York, NY 10016
or Whole Earth Household Store





Robert Dunstan in front of a 17-year-old grove of blight-resistant hybrid American chestnut trees in Florida.

Return of the American chestnut tree

One of the great botanical catastrophes may be in the process of reversing, according to **CQ** *correspondent Robert D. Wallace of Trenton, Florida.*

Up until 1904 the American chestnut (Castanea dentata) was a dominant species in the eastern U.S. hardwood forests. Its delicious nut was a food staple for all sorts of wildlife as well as a major crop for humans. In Appalachia it grew food on hillsides unsuited for any other crop. In **Tree Crops** *(NWEC p. 82) Russell Smith "documents chestnut farms in Europe that produced more tonnage of nuts per square mile than wheat in Kansas or corn in Appalachia, without the destructive practice of tillage or high labor requirements." Even the wood was superior – highly rot-resistant, beautifully grained.*

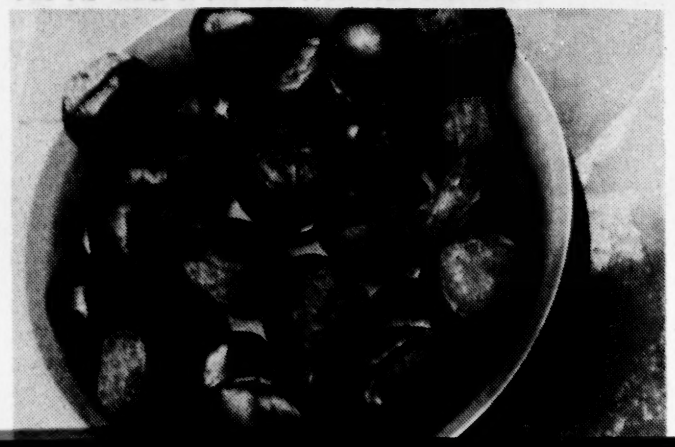
The catastrophe that started in 1904 in New York City was an accidentally imported Asian bark fungus that would girdle the chestnuts and slowly kill them. By 1930 there were no American chestnuts left anywhere. The root systems often survived (and still do), each year hopefully sending up shoots, but the blight inevitably got them. Some relatively blight resistant Asian chestnuts have been found and propagated, but their nut is bland instead of sweet.

Then in the early 1950s came the hoped-for discovery. While pheasant hunting, a Mr. James Carpenter of Salem, Ohio, found a healthy adult American chestnut in a grove of dead trees. It was apparently genetically resistant to the blight. Carpenter did some experiments with the tree and also sent budwood to writer Wallace's grandfather Dr. Robert Dunstan, then in North Carolina, who set to work hybridizing the resistant American stock with Asian chestnut varieties.

Dunstan second generation trees are now flourishing blight-free near Gainesville, Florida. They have the straight high trunk of the American chestnut (instead of the low spreading silhouette of the Chinese and Japanese trees), and their nut is sweet instead of bland. The main Asian characteristic is the nut size – 20-30 nuts/lb. like the Chinese – rather than the 75-150 nuts/lb. of the old American chestnut.

"The dream of thousands of people may finally come true – the reestablishment of the chestnut as a major hardwood tree species in the United States. The Dunstan hybrid chestnut is the first variety of chestnut in over 60 years of breeding efforts to show proven resistance to the killing canker formation of the bark fungus. The tree is currently undergoing nursery propagation. Both one- and two-year-old grafted trees are available. For more information contact Chestnut Hill Nursery, Rt. 2, Box 157P, Trenton, FL 32693." —SB

The 1½" nuts of the new American chestnut.



Agroforestry Review

Tree Crops *by J. Russell Smith* **(NWEC,** *p. 82) repeatedly raised the pertinent question: why do farmers annually waste energy plowing and planting row crops when they could save soil and oil by planting tree foods for animals and people? This group is searching for specific and solid answers to Smith's concern. Their quarterly journal is young and small but informative. Recent issues have investigated potentials of uncommon tree crops like honey locust and Siberian peashrub.*

Good bibliographic reference for serious students of alternative agriculture. —*Jamie Jobb*

Agroforestry Review
(Quarterly of the International Tree Crops Institute U.S.A.)
Miles Merwin, Editor

$6 /year (4 issues)
from:
International Tree Crops Institute U.S.A.
P.O. Box 888
Winters, CA 95694

Forestcover

In the world of shoestring newspapers, this has got to be one of the funniest. The humor is a byproduct of the editor and mixes well with serious coverage of the forestry and reforestation business in British Columbia. Successor to the now defunct **PRWA Newsletter,** *it documents the ecology, economics, and politics of forestry in the great North Woods.* —*Richard Nilsen*

Forestcover
John Betts, Editor

$3 /year (2 issues in 1981; aiming at quarterly in 1982)

from:
Forestcover
RR 3 (Queen's Bay)
Nelson, British Columbia
V1L 5P6
Canada

Ancient Aztecs germinated tree seeds in fish carcasses. Recent attempts at this form of containerization resulted in severe storage and handling problems in the field.

Peltor ear protectors

Peltor brand ear protectors are simply the best I have ever seen. The equipment is made in Sweden and marketing in North America began several years ago. I have tried three or four other systems and there were problems with all of them.

The beauty of this stuff is that all the parts (right down to the mounting studs and springs) are replaceable. No need to throw out more than the defective part. For working in the woods I use the slot-mounted H9P3e ear muff with V1a wire mesh face shield. We have tossed out all other equipment in our operations and rely on this combination exclusively.

The ear muffs fit into the slots on the side of any standard hard hat (that has slot mounts) and then the face shield snaps onto the ear muffs with four plastic studs. Everything interrelates and works together. The face shield is spring loaded so it will stay up out of the way when desired and snaps down into position and stays there when in use.

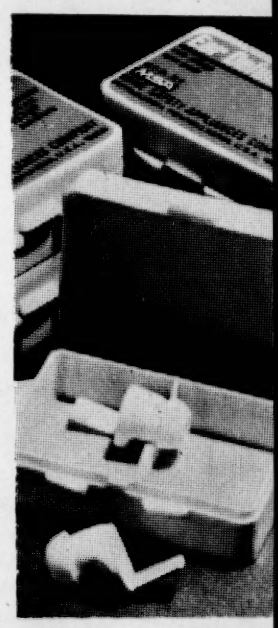
This company makes all sorts of ear and face protection items which can be used in any combination for a wide variety of work needs. The company will supply ear muffs to screen out just what you need screened out. In our woods operation we do not want to hear the loud, high pitched scream of the power saw, but we can hear the human voice well with the muffs on. Most ear protection screens out everything.

—*Lynn Curtis*
Middleton, Nova Scotia
Canada

Peltor Ear Protectors
$8 - $17
Catalog
free from:
Norhammer Tools Co.
P.O. Box 2
79 Doncaster Avenue
Thornbill, Ontario
L3T 3N1
Canada

Ear Defenders

Anyone considering being around rototillers, chain saws, heavy equipment, etc. should take precautions against permanent hearing impairment. The massive amount of noise these things make just cannot be handled by your ears. You first notice this when your ears keep ringing for a couple of days after you've busted your chainsaw. By then it's too late. That's why it's called permanent — it is. Fortunately all sorts of stuff is sold under the name of "hearing protectors." Unfortunately most of it is shit. I've used about every product on the market for the last ten years and the only one that is comfortable and WORKS is Ear Defenders Aural Protectors. They weigh less than a heavy joint and fit in the watch pocket of your jeans. And you can get a pair for a buck along with a nifty case you can hang on the epaulets of your M-65 jacket. You'll never have to replace them unless you lose them. Mine are a ten year old pair given to me by my uncle and though they are soiled and stained a little, they show no signs of wear. —*Gary Scarborough*
Clarksville, Arkansas



Ear Defenders
$1 postpaid from:
Mine Safety Appliances Co.
600 Penn Center Blvd.
Pittsburgh, PA 15235

Children of the Green Earth

A global tree planting organization for children. It was started in July, 1980 by Richard St. Barbe Baker, grand old man of the trees; author René Dubos; Findhorn co-founder Dorothy Maclean; and others. Gentle people with a gentle plan. Arbor Day for the Spider-Man generation. Has your child ever planted a tree? Join them.
—*Richard Nilsen*

Children of the Green Earth
Information
free from:
Children of the Green Earth
Hearthwind
Star Route Box 182
Umpqua, OR 97486

New Roots for Agriculture

This book takes conventional agricultural wisdom and stands it on its head. The problem is not organic versus chemical methods, but rather the plow versus sod: plow and your soil will erode; leave the earth's vegetative skin undisturbed and the soil stays in place.

By way of illustration, Wes Jackson begins by describing a rainy Sunday drive through the Mennonite country of south-central Kansas. These are among the best ecological farmers in business — land stewardship is even a basic tenet of their religion — yet the streams run black with soil from their freshly seeded fields. It's an image that percolates through the rest of the book, because if these are our "best" farmers, then how much mud is in everybody else's streams?

Jackson's solution is to imitate nature, and in this his method resembles Fukuoka's (see **The One-Straw Revolution, NWEC** *p. 74). Instead of raising annuals and churning up the soil every year, plant perennials and let the plant roots hold the soil where it belongs. Instead of monocultures like wheat, plant polycultures that mimic the native prairie flora. With perennial polycultures the trick is to get the yield high enough to make this method feasible.*

Will it work? Nobody knows, because most all the research so far has gone towards perfecting annual crops. At the Land Institute outside Salina, Kansas, Jackson and his wife Dana are busy testing perennial native grasses. From their tiny test plots may come grains for the future. For now, **New Roots for Agriculture** *is an eloquent and disturbing book.* —*Richard Nilsen*

New Roots for Agriculture
Wes Jackson
1980; 155 pp.

$4.95 postpaid from:
Friends of the Earth
124 Spear Street
San Francisco, CA 94105
or Whole Earth
Household Store

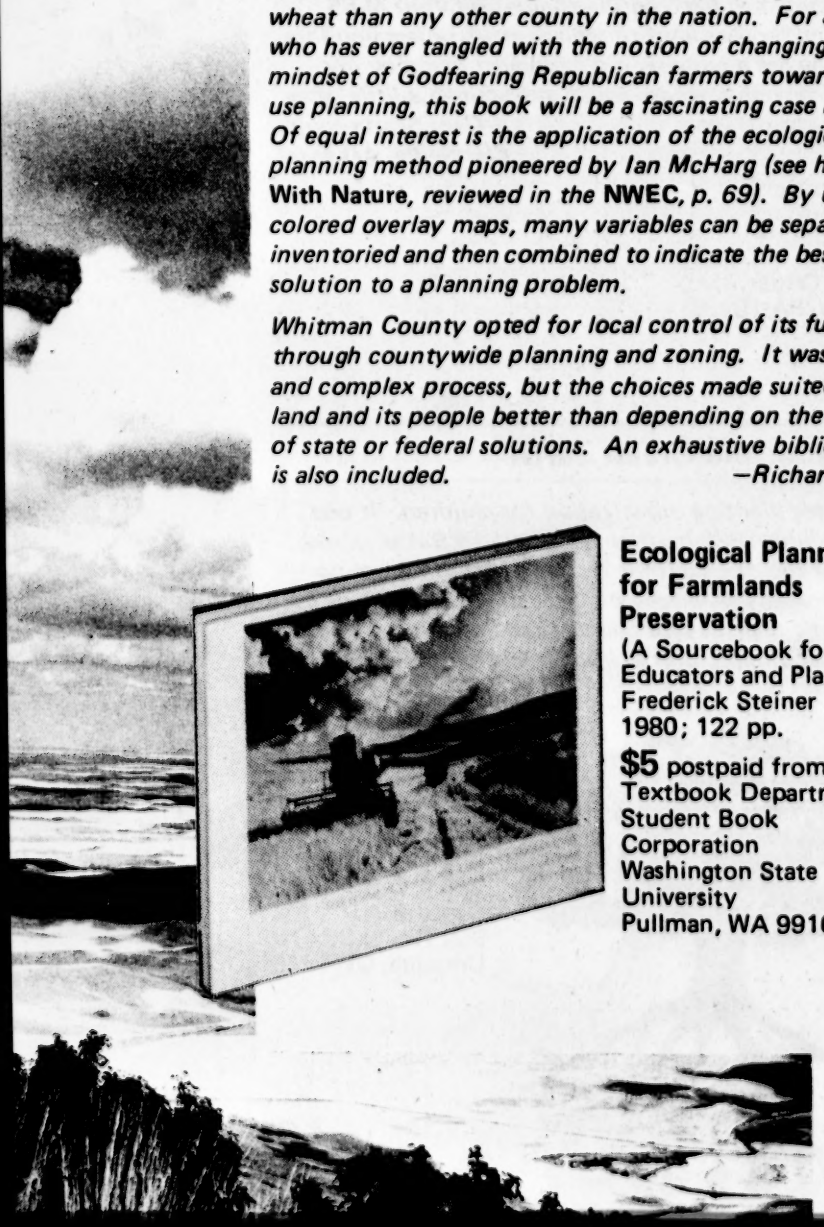
•

From 1971 to 1977, the capital gains on the physical assets of farmers, in fixed dollars, outstripped net income from farming two-and-a-half times over. This is sobering. This only happened because, increasingly, land has become an item of speculation and a hedge against inflation, mostly for people who have more money than they need. Aside from the tax advantages which come from buying land, those with big money can afford to sit it out — that is take the small income on the large capital gain, and let inflated dollars buy the farm. Contrary to the rhetoric of the Nixon administration, which said that everyone loses from inflation, some people *do* gain. Speculators now own increasingly large numbers of acres. The consequence is that in the short run when land is priced above its earning power, the small farmer, or at least the farmer with little money and few assets, is driven out.

Ecological Planning for Farmlands Preservation

This is the story of how Whitman County, Washington is preserving its most precious resource — farmland. Located on the Washington-Idaho border, it grows more wheat than any other county in the nation. For anyone who has ever tangled with the notion of changing the mindset of Godfearing Republican farmers toward land use planning, this book will be a fascinating case history. Of equal interest is the application of the ecological planning method pioneered by Ian McHarg (see his **Design With Nature,** *reviewed in the* **NWEC,** *p. 69). By using colored overlay maps, many variables can be separately inventoried and then combined to indicate the best overall solution to a planning problem.*

Whitman County opted for local control of its future through countywide planning and zoning. It was a huge and complex process, but the choices made suited the land and its people better than depending on the vagaries of state or federal solutions. An exhaustive bibliography is also included. —*Richard Nilsen*



Ecological Planning for Farmlands Preservation
(A Sourcebook for Educators and Planners)
Frederick Steiner
1980; 122 pp.

$5 postpaid from:
Textbook Department
Student Book Corporation
Washington State University
Pullman, WA 99163

Earthcare

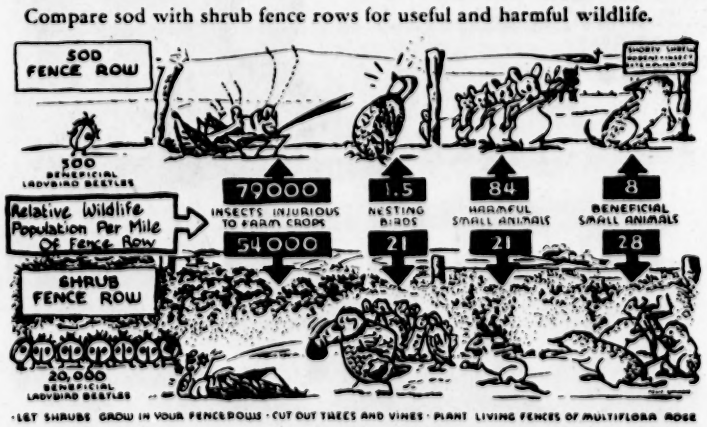
A state of the art survey of organic farming on the Canadian prairies. Such a book has been needed because organic practices that work elsewhere often fail in this land of limited rainfall and short growing season. Wheat for export is king here, but it has been made possible only by mining a 10,000 year legacy of humus from the prairie sod. Result: in just 60 to 70 years about half of the humus has been used up.

Specific problems like salinity due to summer fallowing are discussed, as are soil management practices like intercropping, rotations and erosion control. None of the contributors to this book — many of whom are farmers — harbor any illusions about the ease of turning this system of production-through-exhaustion around. They are well aware of the economic constraints, but all of them recognize a dead end when they see one. With this book, another bioregion now has the beginnings of a method for sustainable agriculture. —*Richard Nilsen*

Earthcare
(Ecological Agriculture in Saskatchewan)
Paul Hanley, Editor
1980; 236 pp.

$12.50 postpaid from:
The Earthcare Group
P.O. Box 1048
Wynard, Saskatchewan
S0A 4T0
Canada

Compare sod with shrub fence rows for useful and harmful wildlife.



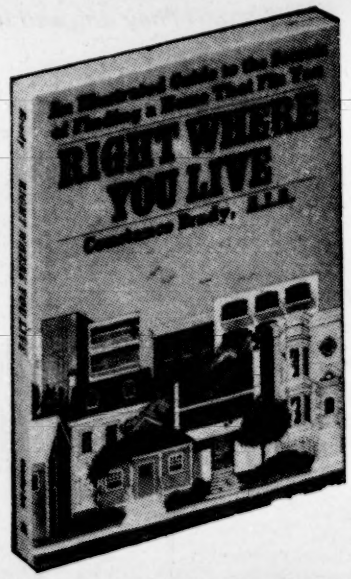
·LET SHRUBS GROW IN YOUR FENCEROWS · CUT OUT TREES AND VINES · PLANT LIVING FENCES OF MULTIFLORA ROSE

SOFT TECHNOLOGY

Right Where You Live

The lucky few can build handmade houses or hire architects; but most of us have to find the best niches we can in the existing stock of houses and apartments. Brady provides a refreshingly detailed guide to doing that finding, looking at dwellings primarily for their habitability — and remodelability — rather than superficial style. (In this, her book is a workbook complement to **A Pattern Language, NWEC** *p. 217.) Lots of clear, useful planning diagrams; checklists to spot problems in circulation paths, workspace, sound transmission, light, air movement, solar input, relations with adjacent structures — all the factors that affect how your own needs, phobias, and preferences can fit into any given dwelling. Brady's chatty, no-nonsense approach should help everybody from diehard dome-freaks to* **Sunset** *readers save a lot of money and grief.* —*Ernest Callenbach*

Right Where You Live
(An Illustrated Guide to the Secrets of Finding a Home That Fits You)
Constance Brady, A.I.A.
1979; 187 pp.
$10.95 postpaid from:
Celestial Arts
231 Adrian Road
Millbrae, CA 94030
or Whole Earth Household Store

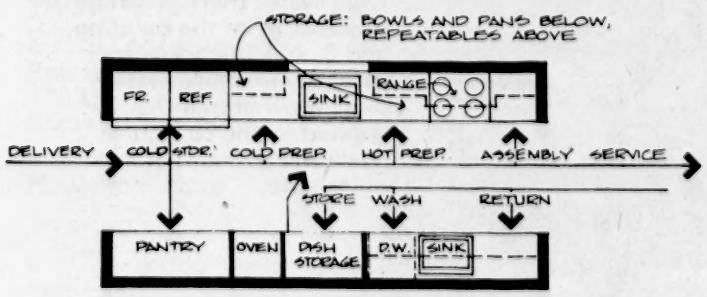


●

The "work triangle" has been the foremost planning tool to determine kitchen efficiency. This "rule" says that if a triangle is formed from the three points made by the range, the refrigerator and the sink, the sides of which add up to a distance of not less than twelve feet and not more than twenty-two feet, then this is an efficient kitchen. On the surface that sounds very neat and sensible. But what does this really tell us? One, it lets us know that the amount of walking we have to do to travel between these appliances will have a limit placed on it. It also guarantees that the distance won't be so small that there will be the side effect of too little counter space, or none at all. But that is all the triangle can do! There are many other considerations and if they are ignored you may end up with a "Bermuda Triangle" in your kitchen, and with similar results. . . .

Commercial kitchens are the best examples of professional efficiency. Since restaurants are paying wages to their personnel, they have to cook and serve food with the least labor possible. If we modify and use some of their methods, we can also save time and labor. . . .

A flow diagram is used to program the design of most commercial kitchens. It is an assembly line that works straight through from delivery of food, to preparation and serving, back to washing and storing dishes. Not only is it not triangular, it is obvious that it is another path, a *footpath!* When cooking is seen as a journey through all the operations of food assembly, it becomes apparent we can deal with it in a business-like manner.



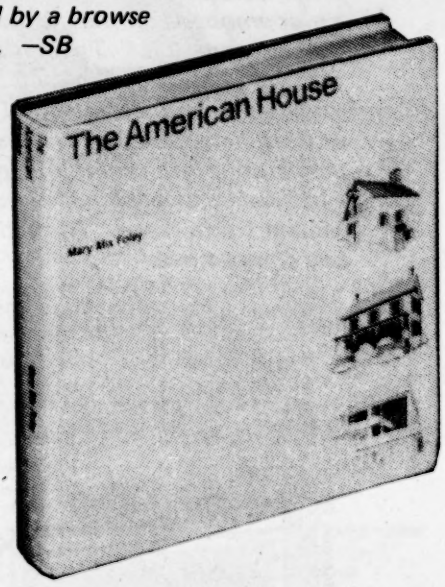
FOOD PATH DIAGRAM APPLIED TO A RESIDENTIAL KITCHEN

The American House

This book identifies with immaculate accuracy every type, variety and hybrid of American house. It illustrates how distinct architectural traditions (English, Dutch, German, French, Spanish) were cross-bred with distinct architectural periods (Classic, Victorian, Beaux Arts, Modern) and blended with folk traditions, regional demands and local politics to produce a style that can be identified as uniquely American. Some 320 line illustrations, as many as three per page of both interiors and exteriors, accompany the straightforward text. —*Diane Rapaport*

If you are designing a house, there is no way your design will remain unchanged by a browse through this wonderful book. —*SB*

The American House
Mary Mix Foley
1980; 299 pp.
$12.95 postpaid from:
Harper and Row
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth Household Store



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In the raw cow-towns and mining camps of frontier America, the false front gave a make-believe dignity to a jerry-built Main Street. If our theory is correct, the corbeled fronts are direct descendants of the Dutch crow-stepped gable. In fact, stepped wooden fronts similar to these still may be seen in Holland. But whatever their type, the important point was the extension of the front above the roofline. With this as a base, American false fronts simply echoed the styles of the day. One of the most popular was the Italianate, distinguished by heavy brackets under the cornice, as seen in the last house of this row. Shop (or saloon) and living quarters typically were combined as they had been in the Dutch town house.

The Crow Step: Typical Dutch House, Nieuw Amsterdam

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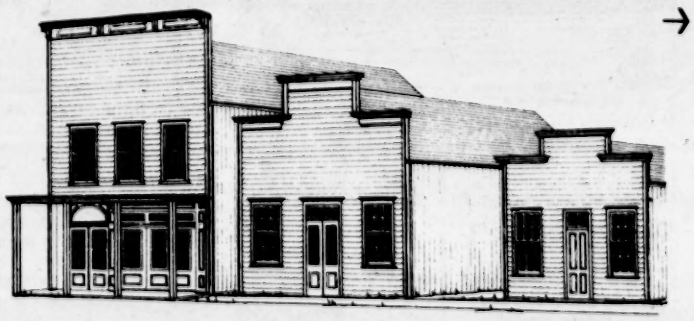


Corbeled and Bracketed False Fronts: "Bad Shot Gulch," Bodie, Calif., ca. 1870; ghost town early 20th c.

→

The "Cajun cottage" is a remarkable architectural antique, a vernacular type so little changed over the centuries that one can glimpse in it the primitive ancestor of the French galleried house. In minimum form, it had only one room and a loft; but no matter how small, there was a *galerie* across the front and a stairway in the traditional position at the end of the porch. No more than one room wide, it might be one, two, three, or four rooms deep, with doors lined up front to back for coolness.

The house is built of cypress, weathered gray; and the primitive chimney is constructed of moss and mud. Doors are the characteristic double French shutters. The doorway is curtained rather than screened, a practice which links this cottage to Italy in the Age of Justinian. Sixth-century Roman paintings show doorways with hangings exactly like this, neatly looped back. Surprisingly, they still can be seen in France today where multi-colored plastic strips now usually substitute for fabric.

Fine Homebuilding

Here at last is a fine magazine on homebuilding, useful and informative for owner-builders, professional builders, architects, remodelers and anyone interested in the many aspects of building and maintaining a house. It is a unique blend of useful instructions, first-hand construction accounts, and design considerations. The drawings are good, and color photos are tastefully selected and beautifully printed. It is published by the same company that does **Fine Woodworking** *(NWEC p. 251).*

Fine Homebuilding *sidesteps what could easily have been pitfalls, like:*

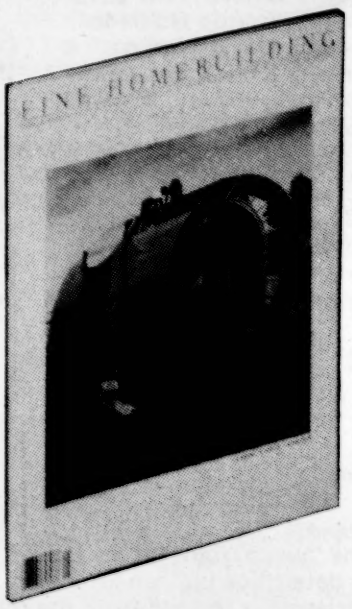
- *over-emphasis on the mechanical such as solar heating or "super-insulation." There is solar info, but it doesn't take up 3/4 of the magazine.*
- *architectural dilettantism. There are obviously architects at work here, but they are turning their knowledge and perceptions into useful information.*
- *half-baked or half-cocked construction essays à la* **Mother Earth News.** *The articles have a ring of truth and competence.*
- *regionalism. Though produced in Connecticut, there is coast-to-coast coverage.*

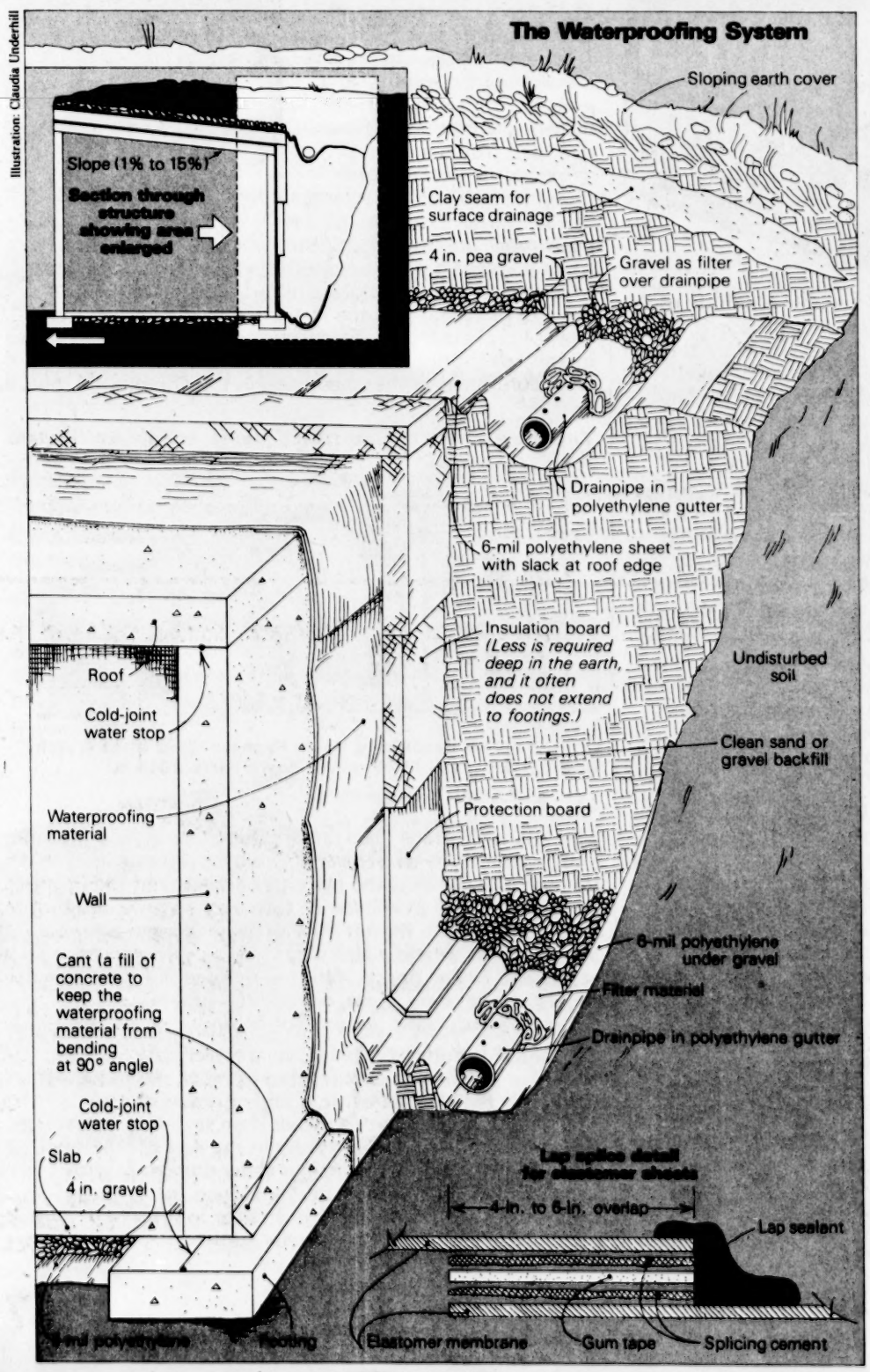
The first issue has a good balance: how to build a staircase, solo timber raising, a low-cost ($25/sq. ft.) house built by a woman contractor with a college student crew, shop tips (a simple plywood cutting jig I wish I'd known about many crooked plywood cuts ago), a compact custom-built solar house, color photos of a large California house of massive timbers. There's a relevant question and answer column, construction details sent in by readers and a great account of some guys who didn't take a concrete pour seriously enough (angled tree limbs for braces, etc.) and the resultant panic and permanent mess; builders will chuckle.

Fine Homebuilding *has obviously been a long time in the making. If subsequent issues are as good as this first one, it should be around a long time.* —Lloyd Kahn

[They are, and it should. —RN and SB]

Fine Homebuilding
Don Raney, Editor
$14 /year (6 issues)
from:
The Taunton Press
P.O. Box 355
Newtown, CT 06470





Waterproofing an underground house is a one-time, do-it-right job. It requires as much care as choosing the proper structural system, and seems to cause most builders a lot more trouble.

No single waterproofing material could possibly withstand all the environmental forces that will test an earth-sheltered building. The answer is a total waterproofing system, one that is properly designed and carefully installed. Such a system requires: 1. Thoughtful site planning and landscaping, so that as little water as possible will have to be dealt with at all; 2. A good drainage system, including proper backfilling material and techniques, so most of what water there is will be diverted from the building, and 3. A well-chosen and carefully installed waterproofing material that is applied to the structure itself and is the final line of defense.

New Shelter

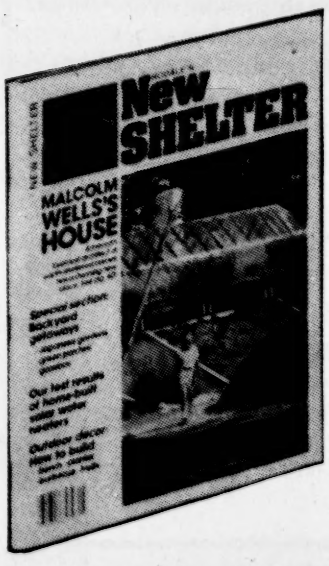
Just over a year old, **New Shelter** *is the Rodale entry into the do-it-yourself home improvement market. The "new" in the title is a recognition of the era of limits we live in, and a good chunk of each issue concerns energy conservation, including some welcome in-house product testing and evaluation. The current issue (May/June) features Malcolm Wells and his new home, and also has a wonderful article on the low-cost solar retrofitting going on in Colorado's San Luis Valley.*

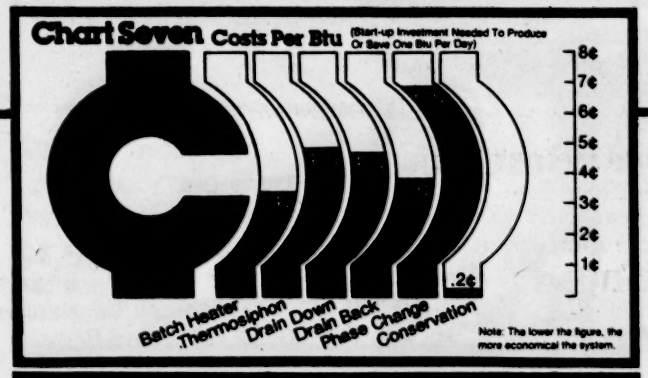
New Shelter *is aimed at an audience that has ambition but little practical experience.* **Fine Homebuilding** *is geared more towards people who already know the difference between a rip and a cross-cut saw, and it has better paper, sumptuous photography, and a finer attention to graphic detail. I'm reading and using both of them.*

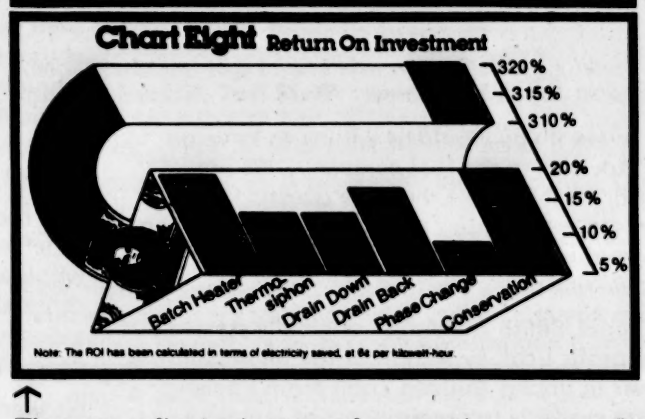
—Richard Nilsen

New Shelter
Robert Rodale, Editor

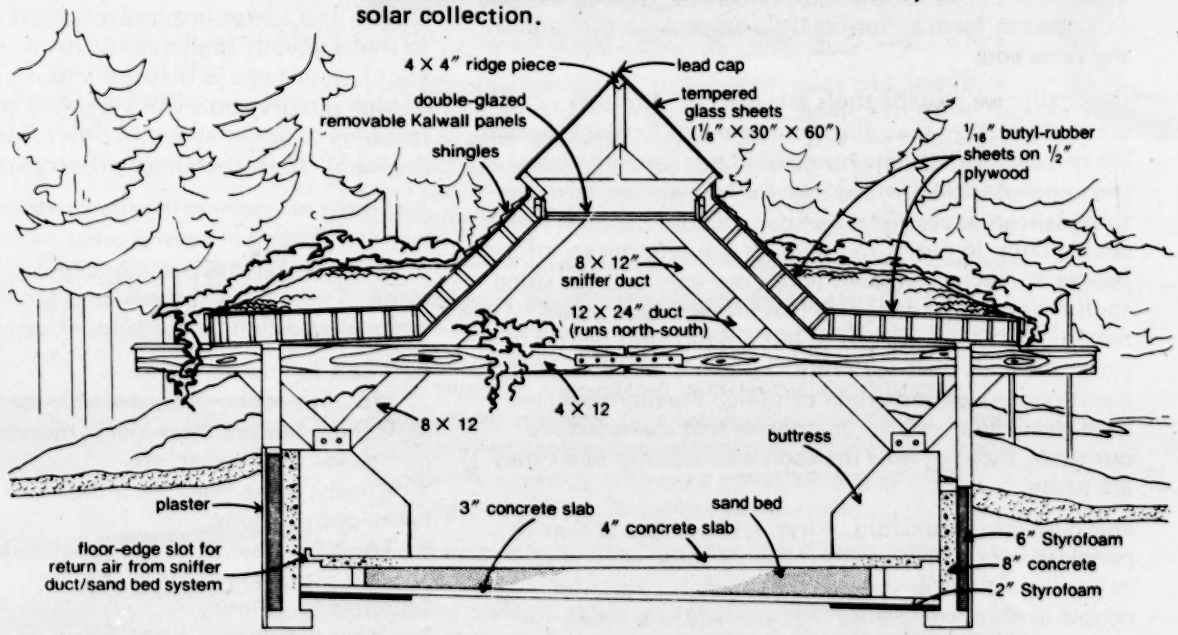
$9 /year (9 issues)
from:
Rodale Press
33 East Minor Street
Emmaus, PA 18049







There were five basic types of systems in our tests. First, we looked at a *batch heater:* an insulated, weather-tight box containing a black-painted water tank. The south side of the box is glazed so the sun shines on the tank, warming the "batch" of water inside. Our batch heater features a curved reflector to boost the efficiency of solar collection.



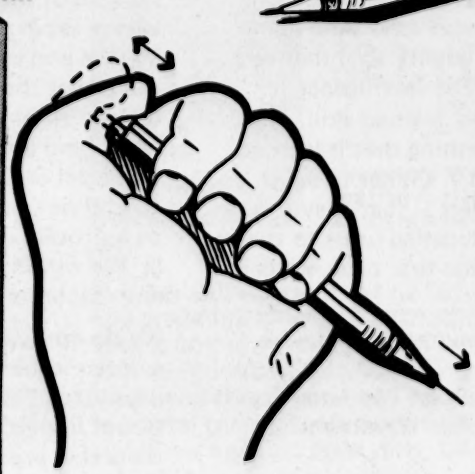
The Wells House: Cutaway (Looking North)

Drafting

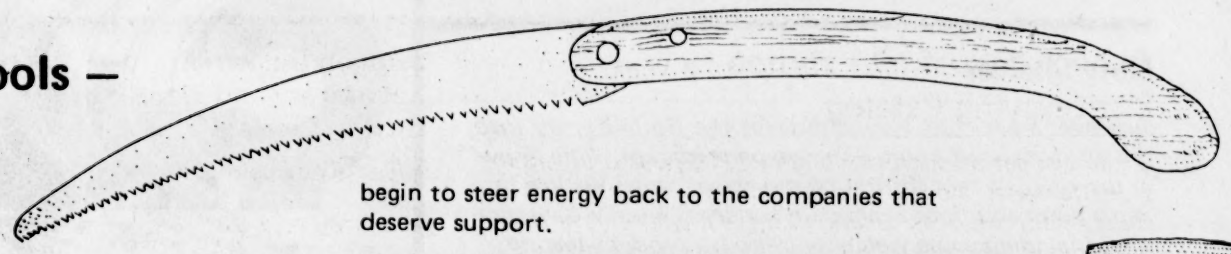
Bob Syvanen has followed his marvelous tricks-of-the-trade carpentry book (Spring '81 CQ*) with this equally marvelous tricks-of-the-trade drafting book. As I look through it I keep mumbling, "Argh . . . I wish I'd had this book last year," or some such remark born of the unhappy nostalgia of a past disaster. Bob has an uncanny ability to explain procedures you just can't find explained anywhere else.*

—J. Baldwin

Drafting
(Tips and Tricks on Drawing and Designing House Plans)
Bob Syvanen
1981; 112 pp.
$7.30 postpaid from:
Bob Syvanen
179 Underpass Road
Brewster, MA 02631
or Whole Earth Household Store



The Very Best Tools — Finding, Marketing, Preserving



Dear Stewart:

I am writing to ask if you would be willing to serve on the Board of Advisors to the tool company. We are asking twelve different people the same question, people whom we feel are keenly interested in seeing the development and restoration of high quality hand tools in this country.

As you may know, Smith & Hawken originally started out under the nonprofit Ecology Action of the Mid-Peninsula. Its purpose was to import Bulldog Tools from England and make them available to practitioners of intensive gardening and farming. Although we successfully concluded negotiations to do so with Bulldog of England, we were advised by our lawyer that we could jeopardize our nonprofit status if we went into the importing business. Because the need for the tools remained, Dave Smith and I decided to form a "for-profit" company to accomplish the same end.

Originally, we saw the tools as a medium through which we could further the educational aims of Ecology Action. We decided that although we could not operate under the nonprofit wing of Ecology Action, we would strive to remain an educational company whose medium was tools. Thus, in our initial catalogs, we attempt to inform people as much as possible about our concerns for using tools that are well designed, that employ high grade materials, that are crafted to last a significant period of time. We have tried to "reinform" our customers about traditional usage and origin of tools. Furthermore, we have given details of the companies that manufacture our tools, showing how the tools evolved into what they are today.

Our purpose is multifold. First, we have found that if people do not turn towards these manufacturers and patronize makers of fine quality, durable tools, the people at these companies that embody and retain the knowledge of forging and materials will soon be unemployed and pensioned. The fact is that bad tools have been driving out good tools in western countries for many decades. Even in England, cheap Taiwan tools are causing the old-line manufacturers troubles as inflation causes consumers to unlearn the real economic benefits of durability. Most of the English tool companies are now on two or three day work weeks.

Second, many of the fine forges in Europe have permanently shut down. Once a forge closes, it is usually scrapped and the cost of opening a new tool forge is prohibitive. There are very few forges left. And hand forging is the only way to make a quality tool that will endure for a generation or more. The intelligence required to hand forge is not an easily learned skill. Most experts will tell you that it is something that is learned from your father and passed down — similar to what Wendell Berry has said about farmers — that they can be born but not trained. Thus, by educating users to the benefits of buying the right tools the first time, we can begin to steer energy back to the companies that deserve support.

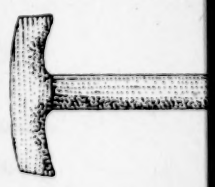
Third, we are convinced that when people begin to change their relationship to tools, from an attitude of use and abuse, towards one of development and respect, that their whole attitude changes toward their work, craft and the world around them. To heft a genuinely well made implement seems to imbue us all with a renewed sense of respect for our craft, others, and the world around us.

The tools we carry are distributed in several ways: mail order with our catalog advertised in several publications; wholesale to retail outlets (mainly small organic garden centers) and to a few individuals who resell them; and at a discount to nonprofit groups. We are continuing to expand the line as we discover tools that meet our standards.

We want you to participate in our search, testing and development of such tools. In some cases this means finding them. In others, it means getting a company to make it. Perhaps it will also mean actually designing the right tools. Our purpose in importing tools is to raise the level of awareness and the dialogue about tools. Jotul, Morso, and Lange inspired a host of American companies to make equally high quality stoves (Vermont Castings, et al.). Our hope is that the importation and distribution of high quality tools will stimulate small domestic manufacturers to do the same. In other words, this company will "succeed" if we encourage others to put us out of business.

Although we carry primarily gardening tools now, we want to expand in several areas. In these areas, we feel there is significant room for development and improvement. They are as follows, and are in the approximate order of addition to our present catalog in terms of timing:

1. Tools for the farmer.
2. Woodlot tools, axes, crosscut saws, mauls, etc.
3. Hand operated machinery, mowers, hullers, oil presses, pumps for wind assist, etc.
4. Energy equipment for indigenous production — hydro, wind, photovoltaic.
5. Tools for boatbuilders — overlooked are some of the old and European tools in this area.
6. Tools for joinery.
7. Other hand tools for mechanical uses.



The role of an advisor to Smith & Hawken would encompass some of the following dynamics:

1. Advisors would comment on tools which we presently carry if they are using them, and give us feedback, criticisms and suggestions. Particularly important would be tips or suggestions to users. These would be printed in the catalog after the tool description with your byline.
2. We would welcome from advisors the names of tools which you think should be sold by us. We would obtain samples of those tools and send them out to those advisors whose expertise includes the work of that tool for examination and evaluation. If everyone agreed, we would carry that tool. Or if you see a tool you would like to try and think it might be suitable for the catalog, we'll buy it and send it to you for comments.
3. Select and suggest books for the catalog.
4. Define your own role as time goes on since this would be a process we would be creating together.
5. We will inform you about how the marketplace reacts and responds to a given tool as well.

We do not want to monetize such a relationship and place a dollar value on it. Nevertheless, we do not want you to subsidize us with your valuable time. Therefore, we would like to compensate Advisors. For comments on tools that are printed, we will pay $25. For suggestions

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*By permission I'm passing on this invitation to advise the Smith & Hawken Tool Company (**NWEC** p. 129) to you readers, who know more than I do. The letter itself is quite interesting, from the same Paul Hawken who deflates inflation on p. 30.* —*SB*

Abbeon Industrial Laboratory and Plant Buying Catalog

If you can get through this big, fat, 700-page plus catalog of instruments, lab stuff, tools, flow devices, etc. without reaching for the order blank, you are made of very stern stuff indeed. From lab microprobe thermometers to affordable wind speed indicators to hand tachometers to blood pressure kits to flex metal to drafting supplies to Swiss Army knives to come-alongs to office supplies — a mind boggling array of goodies that spans from the electronic lab to the homestead. Run by a self-confessed "garrulous old man," the outfit reeks of integrity. Service on my smallish order was very good. The catalog is not cheap, but the price is refundable with your first order.

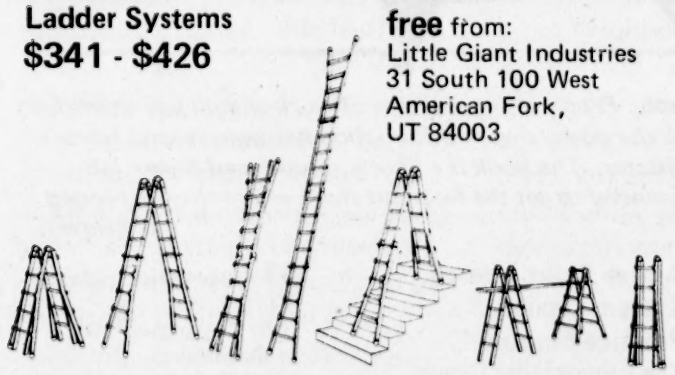
—Gerald E. Myers

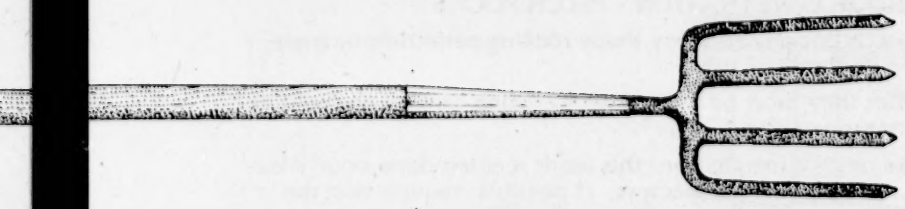
Little Giant Ladder Systems

My experience has been that the ladder I have is not the ladder I need. If I had one of these, I'd have no complaint except a noticably lighter wallet, and that wouldn't bother me at all if I used a ladder often. These things are sturdy and wonderfully versatile. *—J. Baldwin*

Little Giant Ladder Systems
$341 - $426

Information **free** from:
Little Giant Industries
31 South 100 West
American Fork,
UT 84003

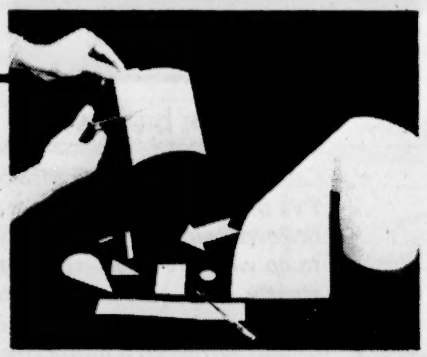




of tools that are used, we will pay $25 each and give you a tool. For evaluation you get to keep the tool. If a tool you suggest sells like crazy and we are embarrassed at such good fortune, we will undoubtedly send you flowers or a gold-plated trowel. Let's keep that open. For books, we will send a free book or another you don't have if you already have the one suggested. For other types of relationships, we will play it by ear.

Enclosed is a self-addressed, stamped envelope. We will try to make sure you don't go out of pocket on this, so make us aware if we are not being attentive to that. I hope you will give this your approbation. We certainly need you or we wouldn't ask. Tools are not something that you can learn about intellectually. Their evaluation requires hands-on experience that will result in new intelligence. If you have comments or questions, call, write, or drop in. I look forward to hearing from you.

With gratitude,
Paul G. Hawken
Smith & Hawken Tool Company
68 Homer
Palo Alto, CA 94301



Abbeon Industrial Laboratory and Plant Buying Catalog
$4.50 postpaid from:
Abbeon Cal
123 Gray Avenue
Santa Barbara, CA 93101

→

Make labels and tags of any size with this tough, new adhesive backed, Tuff Stuff waterproof plastic paper
·Almost impossible to tear. Withstands any laboratory dishwasher. Type on it or use ballpoint pens

Spunbonded Plyoletin is practically indestructible. Use it indoors, outdoors — even under water. Cuts easily with scissors. Type, write or draw on it — has the look and feel of paper. Sticks to virtually all materials — wood, glass, metals, plastics. Cut labels of any shape and use them on laboratory glassware or anywhere else you need durability. Perfect for all outdoor applications — swimming pools, garden tools, autos, motorcycles, pipe labeling, etc. A great material for repairing broken book bindings. Hi-tack adhesive grabs securely — doesn't slide or get brittle.

6 rolls — $1.75 ea. 20 rolls — $1.50 ea. 100 rolls — $1.40 ea.

FLEX··· ···METAL →

This seamless tubing replaces rubber, glass and plastic tubing in high vacuum, chemical, cryogenic and other critical laboratory applications where only the cleanliness, strength, absolute leak tightness and durability of stainless steel can be trusted. Sizes listed are now in stock and available for immediate delivery.

American Working Women's Supply Co.

American Working Women's Supply Co. is a retail mail order business specializing in industrial work products designed for women. Our brochure illustrates our current collection of work gloves and leather aprons. Our goal is to provide a catalog offering a complete line of work clothing and safety equipment for women.

In our two year history, we have heard from carpenters and welders, botanists and marine biologists, zookeepers, chimney sweeps, wood and metal sculptors, truck drivers, a woman-owned landscape service in Seattle and a woman-owned construction company in St. Louis. Also among our customers are women who tend the family food garden and split wood to feed the home woodstove.

—Kaye Sherry Hirsh
Director of Marketing

American Working Women's Supply Co.
Catalog
$.25 postpaid from:
American Working
Women's Supply Co.
P.O. Box 100
Deer Park, NY 11729

→

Women's Work Gloves (#W5801), leather/cotton, in one size to fit women, $11 postpaid.

↑

Leather Bib Apron is cut to 18" wide by 24" long from top grade heavy weight pearl split leather and includes four grommets and three leather ties for an adjustable fit. It is designed for welders and other industrial workers who need protection from sparks, heat and fire but also is a good general work apron protecting against cuts, abrasions and just plain dirt. **LA5807 $18.75**

Fireplace bellows

Considering the boom in woodheating now in progress, I've been astounded there hasn't been a plethora of bellows being offered. I was given an antique bellows to go with my Vigilant stove/fireplace, and I use it constantly — to start the fire when I'm cold and impatient, to restart the fire when I'm careless with the kindling or inattentive to a dying fire. With a bellows you can even get green wood burning.

This is almost the only bellows we've seen available by mail. (No doubt there will soon be more.) I don't know its quality, but if it's any good at all, the price is right. *(See also p. 113.)*

—SB

Fireplace bellows
$20.20 - $32.30
postpaid from:
Weston Bowl Mill
Weston, VT 05161

Item No.	Size	Unf.	Fin.*
FB-1	16½" x 6"	$20.20	$22.20
FB-2	16½" x 7"	$23.95	$26.70
FB-3	26" x 8¼"	$29.55	$32.30

***"Nat" = Natural (Clear) Finish, "Col" = Colonial (Walnut) Finish. Please specify.**

Soapstone stoves

Older folks to whom woodstoves are not a recent fad will tell you that the best stoves were made of stone. Pound for pound, soapstone holds twice as much heat as metal. That means as the fire flares up and dies down, heat is much more even and long-lasting. It also means that there is less of the Dreaded Creosote. And this is accomplished without fancy gadgets and complexity. The stone looks nice too. Yes, they cost more than most metal stoves, but I'd say they're worth it. (My grandmother had one and as a kid I liked it a lot.) These folks make soapstone griddles too. *—J. Baldwin*

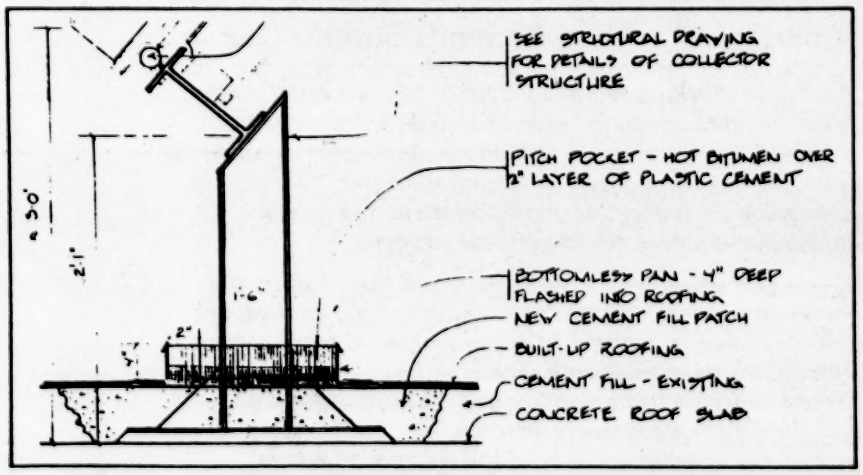
[Suggested by John Michael Gendron]

Woodstock Soapstone Stoves
$995 plus shipping
Catalog
$1 from:
Woodstock Soapstone Co.
P.O. Box 223
Woodstock, VT 05091

Active Solar Energy System-Design Practice Manual

The U.S. Department of Commerce lays upon us some advice on what works and what doesn't work in active solar heating systems. The information has been hard won. People doing this sort of work should pay attention; all the doesn't-work information has been reaped from disaster. The book is a poorly-reproduced Xerox job intended to get the facts out there where they're needed.

—J. Baldwin



Active Solar Energy System-Design Practice Manual
The Ehrenkrantz Group and Mueller Associates
No. Solar/0802-79/01
1979; 228 pp.

$17 postpaid from:
NTIS
U.S. Department of of Commerce
5285 Port Royal Road
Springfield, VA 22161

←
ROOF PENETRATION - PITCH POCKET

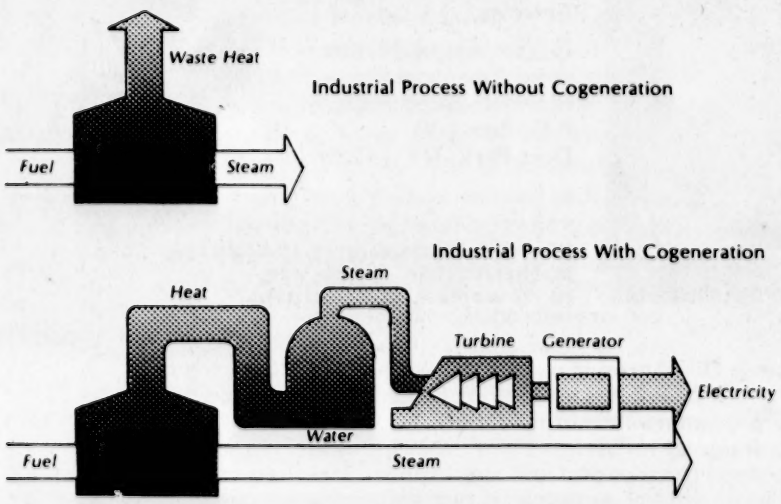
Pitch pockets take any shape roofing penetration: angle, wide flange or tube.

But they must be refilled with roofing cement periodically or they will fail.

In retrofit installations this work is often done poorly by plumbers or steel erectors. If possible, require that the work be done by roofers.

Cogeneration

How Cogeneration Works



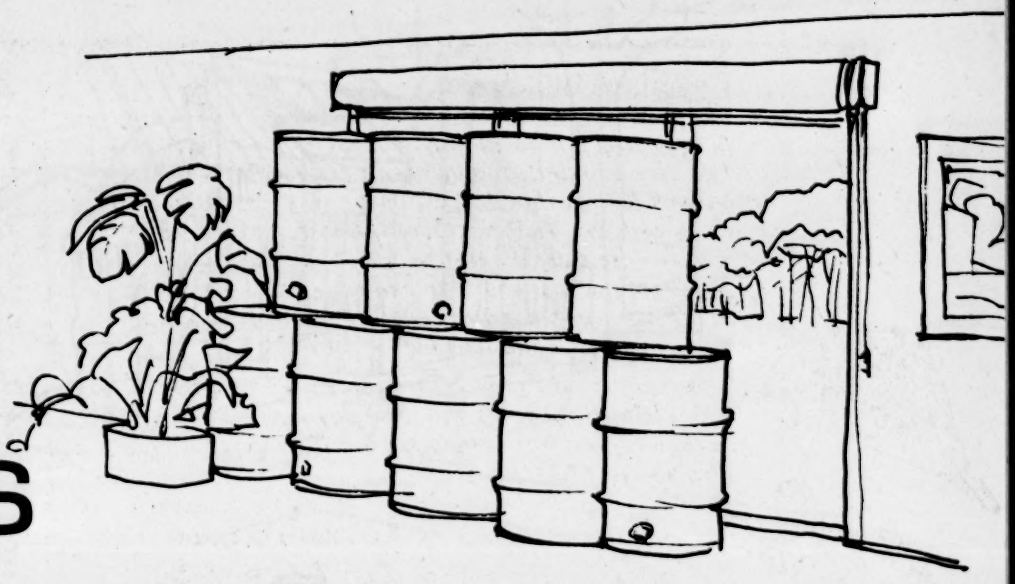
There isn't any question at all about whether cogeneration (using waste heat from one process to power something else) is a good thing to do, but how to implement a cogeneration program isn't all that easy. Even if you are convinced that you want to cogenerate, there are thickets of permits, engineering studies, and environmental investigations that must be dealt with. California, as usual, leads the way with a strong state program backed noticeably by Governor Brown. This booklet published by the Office of Planning and Research is a model of what such things should be. And the State of California even has an office that'll help you with the permit messies!

—J. Baldwin

Cogeneration
(Energy for the '80s and Beyond)
Governor's Office of Planning and Research
No. 0031-1013-3
1980; 25 pp.

$1.25 postpaid from:
General Services
Publication Section
P.O. Box 1015
North Highlands, CA 95660

Those Ugly Solar Buildings



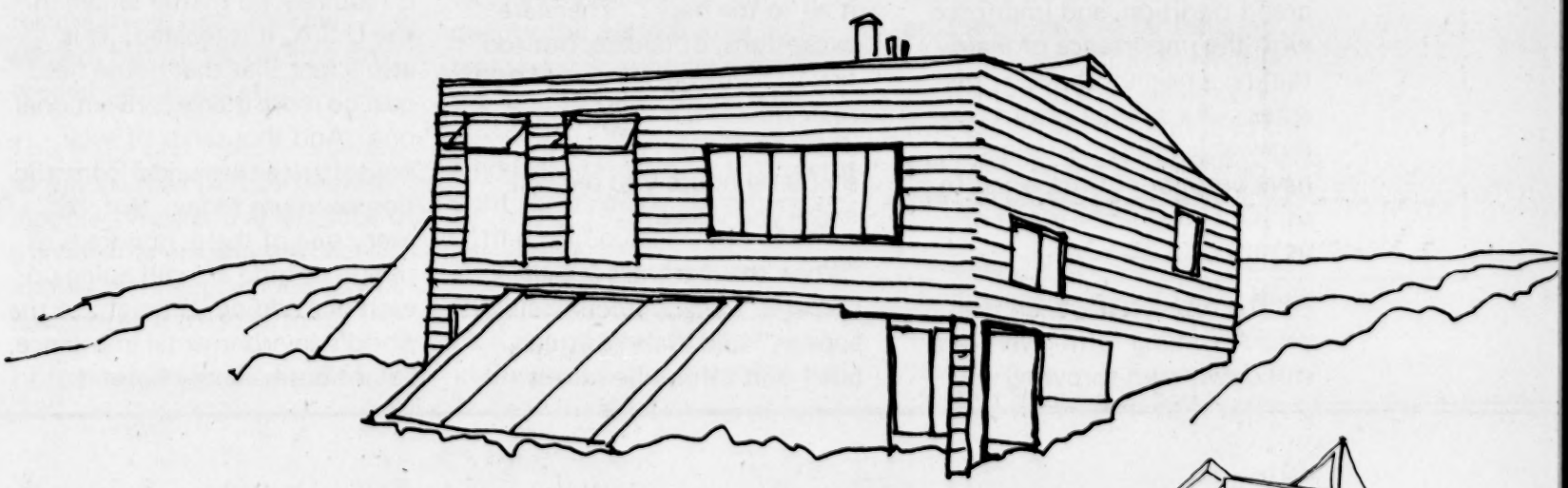
by Malcolm Wells

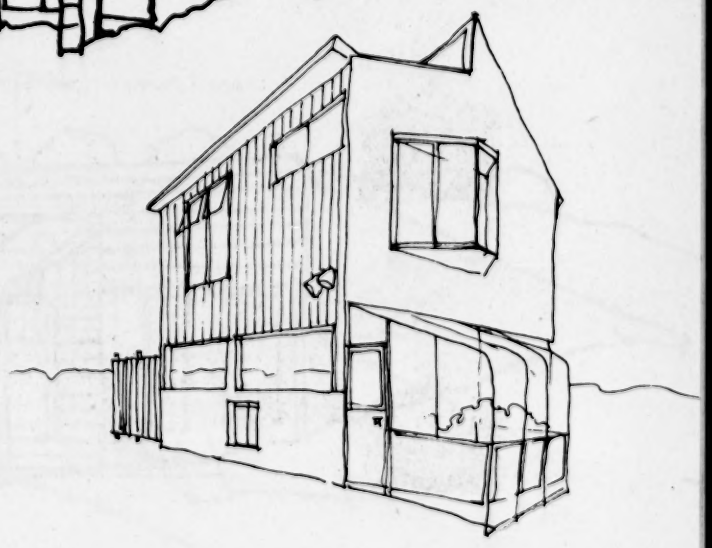
GIANT OIL drums filled with water stand behind a wall of glass, storing sunlight till after dark. Baggy sheets of white fiberglass now conceal a lovely old brick wall, capturing energy at very low cost. A grotesquely proportioned house, looking like a collision of rough-sawn sheds stained an electric brown, features a mixed bag of windows on its sunny sides, picking up enough solar radiation to chop its fuel needs by 74%. (The structure has all the architectural grace of an offshore oil rig.) Black-painted concrete covered with glass is the front wall of a new house, jangling a quiet neighborhood into solar antagonism. An underground house, its split-shingle facade struggling to deny its own earthiness, embarrasses an entire community while enfolding its owners in warmth and silence. A greenhouse, bearing no proportional relationship to its host, appears on the side of a house, catapulting the weathered structure into the solar age. And, downtown, a giant billboard of glass with nothing to advertise tilts back dizzily to face the sun, warming part of an office complex with its antics.

Solar heating has arrived.

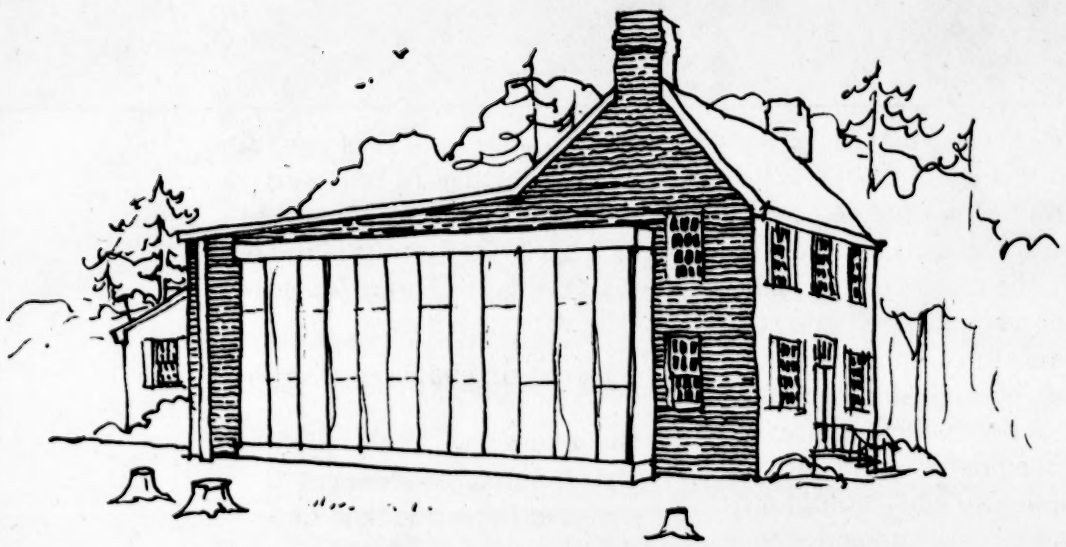
But where have all the architects gone? Surely no architect designed those doozies. Or did he? . . . a registered professional architect?

I'm afraid so. Every building described above was produced





*Malcolm Wells is renowned as an architect of underground buildings (***Underground Designs, NWEC** *p. 240), but he's also acquiring a reputation as the conscience of his profession. If this article intrigues you, take a look at his newest book* **Gentle Architecture** *(1981; $22.50 postpaid from McGraw-Hill Book Company, Princeton Road, Hightstown, NJ 08520). As for his illustrations here, he asked for us to say, "The buildings shown in the drawings are of honest-to-god existing structures with just a few details changed to prevent the unproductive hassling of their owners." —SB*



by someone schooled in the fundamentals of proportion and scale, steeped in architecture's grand tradition, and imprinted with the importance of maintaining a neighborhood's character. Our sudden return to renewable resources seems to have brought out the worst in us. Or brought the worst of us out.

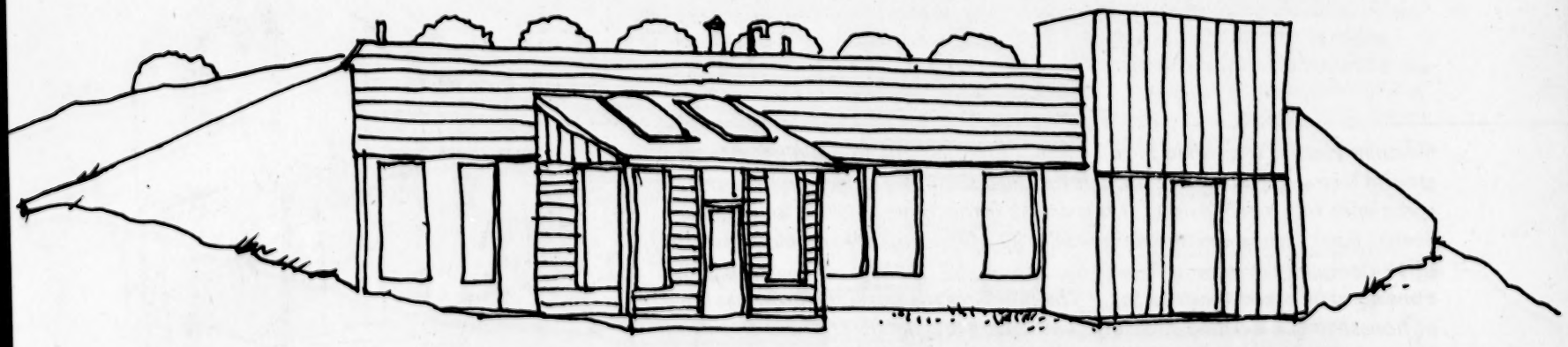
All the top designers, all the award-winning form-givers, are still downtown throwing up their fuel-gulping towers of glass, wanting nothing to do with energy-efficient design, leaving it all to the hacks. There are exceptions, of course, but too few to mention; 99 out of 100 solar houses are dogs, and chances are the next earth-sheltered house you see will make you wince.

"When the materials are all prepared the architects shall appear," said Walt Whitman, but I don't think he meant the solar architects who use those materials today.

Is there something about solar structures that makes them inherently ugly? No way. Every tree in the forest is a solar structure. Every tree in the forest — and the forest as well — is beautiful. We are surrounded by perfection in solar design. We evolved in a solar world. The immense appeal of green plants, from the rose in the garden to the redwood on the coast, attests to our solar good judgment. But our solar houses are dreadful. What went wrong? Is the whole idea still too new to us? That's no excuse. The first responses to other new ideas often exhibit great simplicity, clarity of expression, and beauty. So why is it, then, if superb examples are as close as the nearest green plant, that almost all solar and earth-sheltered buildings are so grindingly ugly?

I'm not sure.

I am sure, however, that a new house, right now, can easily be built in such a way that little or no heating or air conditioning is required, no matter where in the U.S.A. it is located. It is also a fact that that house need cost no more than a conventional one. And thousands of solar houses are either under construction or in use today. But, for every one of them, hundreds of the other kind are still going up, each one adding its weight to the world's environmental imbalance. Solar houses simply haven't

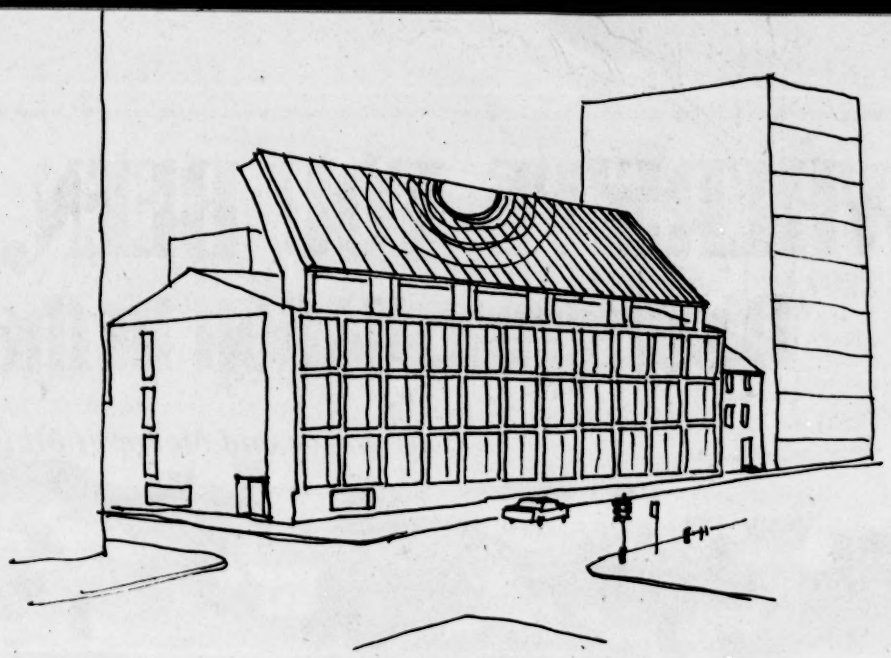


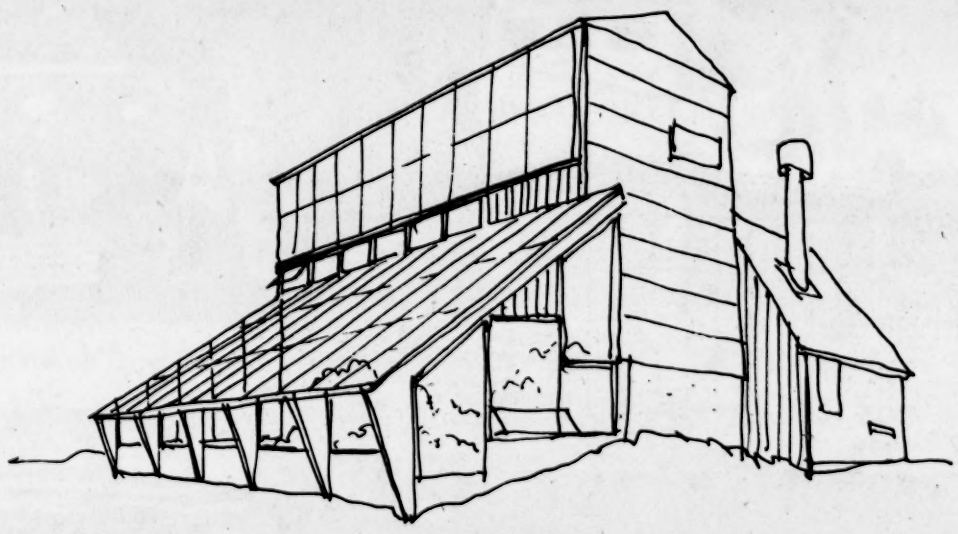
captured the national imagination. And no wonder: our garish responses to sunlight are about as appealing as birds' nests made of blue plastic. Inexcusable.

It would be funny if it weren't so sad. Here we are with a full-scale energy disaster threatening us and our responses, so far, have been ugly houses — and nuclear power! No wonder our most gifted designers shy away from the whole energy challenge. This is precisely the time for a great new American architecture to emerge, an architecture as appropriate as Frank Lloyd Wright's, as popular as the Cape Cod cottage.

Solar houses aren't ugly because of ugly components. Most solar devices are as inoffensive as windows. It's how we use those components that counts. We have at our fingertips almost everything needed to take the sting out of buildings. Earth shelter, sewerless toilets, task lighting, superinsulation, porous paving, and solar heating offer us ways to build without destroying land in the process. Gentle architecture can actually help restore dying land, making gardens out of old parking lots, eroded farms, and strip mines.

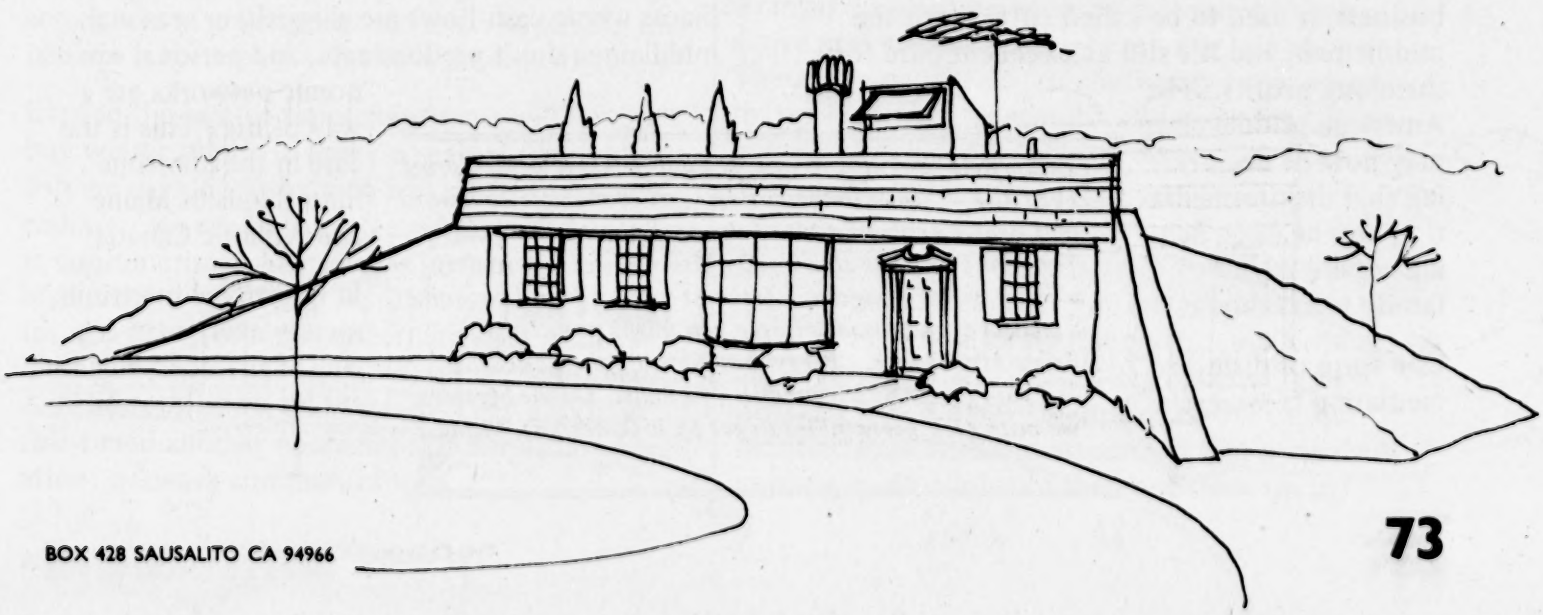
This is the best news in architecture since man first carried fire indoors. We stand at the edge of a great solar era and the best-known architects among us will have nothing to do with it.





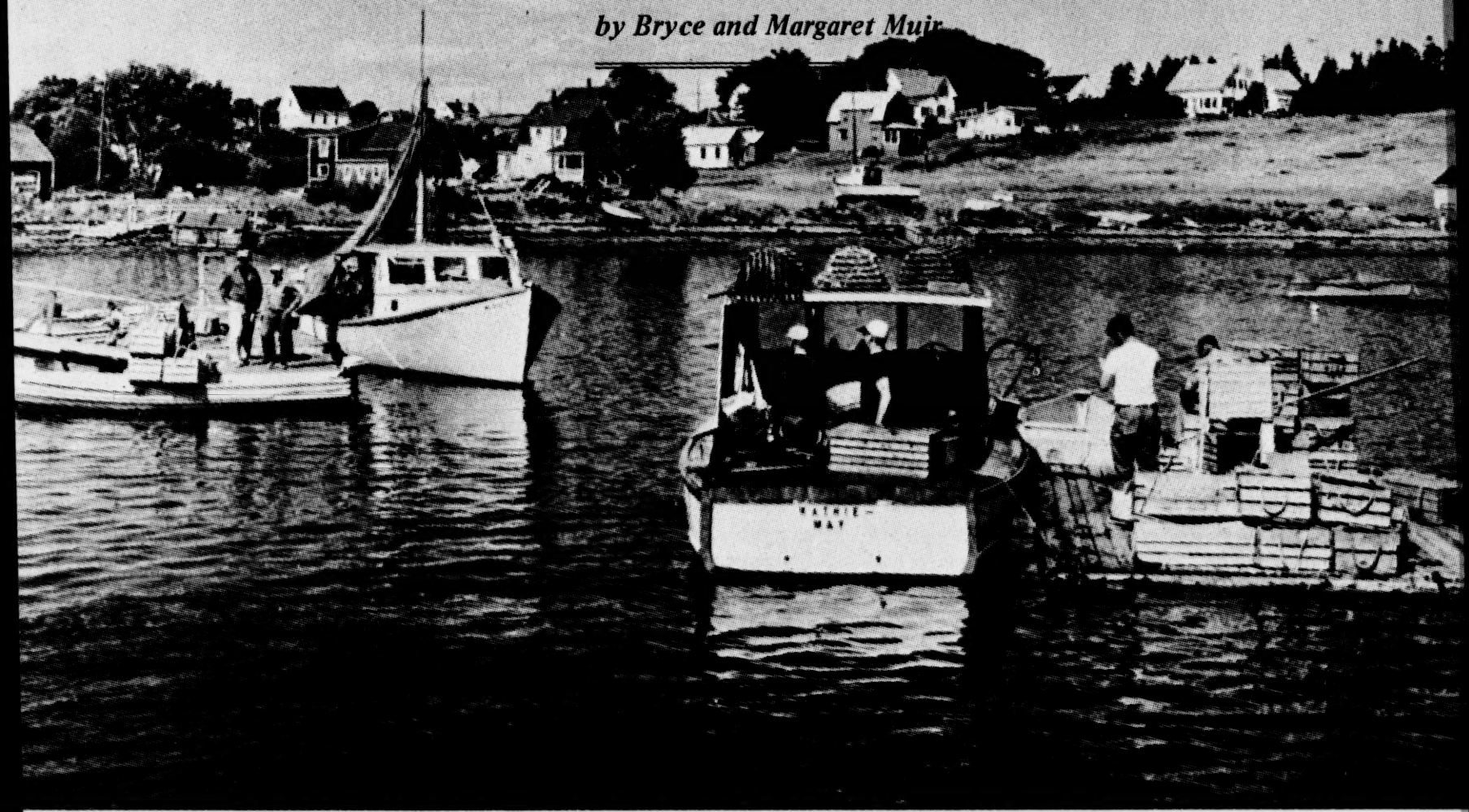
I often marvel at the kind of imagination that produces films like **2001** and **Star Wars**. The set designers for such spectaculars may have just the quality the average solar architect lacks: a stunning sense of the appropriate. Name your planet and they'll come up with a house — or a city — that seems right for its place. Organic, fitting, and convincing. These are exceptions, of course; I think of Marlon Brando and his Hollywood chandelier of a city in **Superman**, but even that had a consistency to it you seldom see in Earthbound solar buildings. Yes, those set designers could probably do what most of us architects have so far failed to do: think about our inevitable return to full solar dependency here on the living earth, and the then give us an architecture worthy of it.

"I swear to you the architects shall appear without fail." Well then damn it, Walt, tell them to hurry up. ■



"WHERE'VE YOU BEEN, STRANGER?"
Disintermediation in the Maritimes

by Bryce and Margaret Muir



THE "SUBTERRANEAN ECONOMY" has gotten a lot of press recently, as if barter, or discount cash business, were some wonderful new invention. Less affluent Americans have always used these strategies, of course. It's only when their middle class cousins discover invisible income that it becomes news. Leave it to the middle class to rediscover the obvious.

Now Paul Hawken has put a new catchword on the tips of our tongues: disintermediation. In business, it used to be called cutting out the middleman, and it's still an excellent cure for shrinking profits. The American middle class may now be discovering that disintermediation also heals an aching wound in the family pocketbook.

One form of disintermediation is increasingly popular: networking. The '80s are the decade of the personal network. The happy coincidence of a contracting economy and an information revolution makes this inevitable. Exchanging goods, services, and information through extended personal networks, we can dispense with middlemen and stretch our dollars.

To read **CoEvolution Quarterly** you might think that networking is a brave new world. Disintermediation by personal network is, in fact, as old as islands. Hawken points out that middlemen proliferate where there is continuous economic growth. In places where cash flows are sluggish, or seasonal, middlemen don't predominate, and personal economic networks are a way of life. This is the case in the maritime hinterlands of Maine and Atlantic Canada.

In traditional maritime society every man is a jack of all trades, able to: cut his own firewood;

This article responds to one by Paul Hawken in the Spring 1981 CQ – "Disintermediation – an economics buzzword that neatly explains a lot of the good that is going on." The Muirs propose that a fully disintermediated society already exists along the Northeast seaboard, and has some advantages and disadvantages you might not expect. Bryce Muir writes, "Peggy is an anthropologist/teacher and I am presently a toymaker/journalist. On the big tides we both pick periwinkles to get by in Jonesport, Maine."

–SB

build a house and boat; make and mend fishing gear; fish and hunt; keep animals for meat and dairy products; do his own boat and auto mechanics; plumb and wire. In a pinch he can do a little smithing in the parlor stove, some rough doctoring offshore, and put down a wellpoint by hand. Each maritime woman is a respected master at the arts of child rearing and housekeeping. Raising, gathering, and preserving; making and mending clothing; and keeping the social gears greased are all in her day's work. These traditional skills enable disintermediation in spades.

When cash is abundant, maritimers may hire out some or all of the subsistence chores: buy California lettuce, take the car to a garage, send away for a new dress. So long as cash work, or good fishing, produces surplus income, beyond present needs and subsistence maintenance for the off season, specializations proliferate. When the fish are running, there's lots of work for carpenters. When the catch is off, I can pound my own nails, thank you.

The uncertainties, and seasonality, of maritime cash flow mean that no specialist can depend on continuous employment. Carpenters cut pulp in the winter. A grocer may own a truck for hauling gravel. Anthropologists call this diversified pattern of employment "seasonal pluralism," and it is an appropriate adaptation to the ebb and flow of a resource-based economy.

Seasonal pluralism makes maritimers sensitive to any opportunity for disintermediation. Consider the fish business. When I can go out and catch 10,000 pounds of groundfish a day, all I want to do is come in, dump those babies on the dock, gas up, and get back at them. I'm willing to take a lower price from a middleman, so long as I can land big volumes, and he can worry about the market. But, when the best I can do is bring in 50 pounds of lobster for a day's haul, I might be tempted to float those lobsters in crates until I have a truckload, and personally deliver them to a restaurant owner in Ohio – for a big cash price. (IRS doesn't like that one bit. Government bureaucrats are the ultimate intermediators. They stand between us, as taxpayers, and ourselves, as consumers of government services. Bypassing the taxman is the lowest form of disintermediation.)

Even in the best of times maritimers will tend to buy winter staples in bulk, in season. While the fish are running, fishermen will salt away enough cash to cover winter subsistence before they indulge in consumerism. Affluence is just another run of luck which has to end. Maritimers are prepared for for an age of economic uncertainty. A healthy distrust of affluence and a full set of traditional skills stand them in good stead. They also have fine-tuned another necessary skill for disintermediation: network communications.

While every maritimer is a jack of all trades, any given man may excel at one trade or another. If you have a gift for engine mechanics, I may prefer your work to mine – so long as we can come to some arrangement. Maybe you'd like some of the special cheese my wife makes. Not only is the distribution of special aptitude uneven, so is the availability of capital equipment. Unlike the suburbs, where every house may have a lawn tractor, perhaps only one man in a fishing village has a tractor, or a set of torches, or a torque wrench. Matching individual needs with local skills and appropriate tools requires information.

Getting and maintaining access to economic information is a constant pursuit in the maritimes. Much of what passes for nosiness is just keeping track of economic activity and capital equipment. I watch my neighbor's tractor in the spring. When he hooks up the rototiller I know he's stopped skidding pulpwood for the year and is ready to plow gardens. That's the time to make a deal to bust up my new potato patch – not before. Any maritimer can tell you the optimum moment to access someone's economic skills, and where every major tool in town is at that instant – or he knows who to ask.

Maritime men and women spend a considerable portion of each day maintaining personal networks – in no small part to have continuous access to economic information. Usually founded on kinship, a personal network will tend to encompass all those persons whose skills and material resources are necessary for one's subsistence. Maritimers also frequent those places generally known as information exchanges. Restaurants in coastal Maine are often the place where men drink coffee and keep up on what's going on. A boatbuilder's shop or the manager's office on a wharf may be the local information brokerage house.

The key to continuous access is constant attention. Maritime men are expected to contact each member of their active network every day, face-to-face. If you don't make the rounds for a couple of days, you will be greeted with, "Where've you been, stranger?" Maritime women chat around their active nets numerous times each day, via phone. These channel checks, or continuity tests, assure that news circulates rapidly, and they identify an individual as a dependable member of the network. You are always logged in.

Once logged in you may have to fulfill network obligations at a moment's notice. If you have a labor exchange understanding with your brother-in-law, and you see him hauling his boat, you'll stop and lend a hand. Summer visitors to the maritimes always seem astounded that a man will promise to do a job and then not show up for

weeks. Summer people don't understand that a maritimer is juggling a raft of obligations, many of them dependent on chance of the weather and the pattern of activity in his network – all unpredictable. If a maritimer promises to do a job, he will, but when is a matter of circumstances. You don't "make a date" with a maritimer. This unscheduled sort of disintermediation doesn't suit an industrial environment.

Industrial wage work, or any sort of regular hours, tend to disconnect you from local economic networks – which is only fair. You won't be in the restaurant on windy days, or on the phone while the baby naps. Professional women in the maritimes find this particularly destructive, because network breakdown disrupts their female solidarity as well as their economic access.

The point for middle class Americans who might turn to disintermediative networks in the face of economic adversity is that personal network maintenance is extraordinarily time consuming. Total access to local disintermediative goods, services, or information takes a total commitment. You can't just plug in when you want access. Disintermediative networks in the larger society often suffer from the same complaint: a bad signal to noise ratio. Computer data banks can spew out reams of information before you find the bit you want. Just so, you'll suffer through hours of small talk at the restaurant before that one vital bit of information comes along. Time may be the price we pay for networking.

Let's follow a maritime search routine to see what it entails. Say we are looking for a work crew to move a building, and our local economic relations are all in order. We'll wait for a blowy day when all the fishermen are ashore. First we activate our close network, letting them know what we are planning. We'll go to the restaurant early in the morning and let it be known, casually, that we plan to move a building at such a time and are in the market for labor. Shortly before the stated hour we'll go to the beer store, buy a few cases, and announce the job. As if by magic, a crew will materialize. After the job is done (and the beer), we'll offer to pay the labor at the universal local rate (say $5 an hour). Some may accept payment. Most will refuse, citing a previous debt to us, or suggesting an alternative payment in kind. "Maybe I can use your house jacks sometime," or "I'll probably need your help sometime."

You can see why access takes attention. That last crew member, who expects to use our labor sometime, assumes we'll know when, because we are regular players in the game. Similarly, automated barter networks will only be generally useful if there is a variety of necessary goods and services always available locally via the net. Otherwise they will merely be an economic sideshow.

Personal economic networks have political implications. The ripoff artist is quickly ostracized. If you don't play fair, you don't play long. This not only includes providing quality goods and services, it means adhering to the local wage level. My time is no less valuable than yours, doc. You can allow for amortizing capital equipment, but everyone paid for his education – don't be putting on airs.

A ROUGH JUSTICE prevails in fishing communities. Economic advancement (getting ahead) while your neighbors only get by, makes you a target of jealousy. Too much conspicious consumption is antisocial, and the local teenagers may trash your property some dark night.

Once integrated into a local exchange system, you realize that every good and service has has a recognized fair value. Every one knows how long it takes to time an engine. Everyone is keeping score. I know you owe me fifteen minutes of sweat and a bale of hay. Everyone's goal is "balanced reciprocity" – tit for tat. This has the advantage of making us all economic equals, and the disadvantage of reducing us all to the lowest common denominator. Those who wish to break out of equalized subsistence must go out into the larger economy for cash income, and forfeit access to the exchange network. Outsiders pay top dollar for local goods and services.

The prevailing economic assumption in the maritime culture is the idea of "limited good": there is only so much resource to go around. Every fish you catch is one less for me, so we better share more or less equally. A rough justice prevails in fishing communities. Economic advancement (getting ahead) while your neighbors only get by, makes you a target of jealousy. Too much conspicuous consumption is antisocial, and the local teenagers may trash your property some dark night. Don't be greedy. Set out 1000 lobster traps in an area where most men fish 500 and you'll lose a lot of traps. By the same token, if your luck is bad this season, and I've been doing all right, I might give you a hint where to set some gear, lest you call me greedy.

The idea of limited good has been dismissed as a

shortsighted local view, suitable for peasants, perhaps, but not applicable to industrial civilization and economies of scale. Only recently have the limits to growth become a topic of discussion in the larger society. The economic egalitarianism of the maritimes may become a more popular social adaptation as we approach the limits to resource development.

The intrusion of outside capital, and the acceleration of technological innovation have disrupted the maritime homeostat. Fishing communities, local resources, and environmental conditions traditionally composed a dynamic steady-state system. The limited marine resources were treated as common property. If one man took too much, it was at the expense of all, and he was castigated. Fish and men survived together in rough harmony. The process of modernizing maritime society is hardly complete, and the old values endure below the surface. Maritimers may have to depend on their traditional common sense during the next decade.

Another political aspect of maritime culture has implications for wider disintermediation by networks. Every man is taken at face value in the maritimes. Each maritimer speaks for himself, out of his personal knowledge. It is recognized that each view of the world is different, and no one local view has higher authority. Anyone presuming to a position of leadership is accused of being big headed. Anyone presuming to have the last word on a local subject is laughed out of court.

This is not how information is treated in American society at large. We have experts and specialists whose opinions have authority. Scholastic knowledge is hierarchical. This stands to reason. When we are building towers of abstraction, we must agree on the foundations – call something "truth." An orderly hierarchy of abstractions is fine, if we are constructing academic models. Adhering to a generalized "truth" can be dangerous in real life. Concrete local knowledge too often contradicts a lovely abstraction. Network communications must be egalitarian lest they lose touch with local realities. Arbitrarily rejecting local knowledge in favor of the conventional wisdom has made the mass media a sorry vehicle for the transmission of useful and accurate information. Part of the success of the **Whole Earth Catalog** and **CoEvolution Quarterly** is that all submitted information is treated as equally valid. This is open networking – the only way to guarantee the free flow of information.

Maritimers are generally open-minded about new information. When my truck exhibits mysterious symptoms, I will certainly put more faith in the opinion of a gifted mechanic I know than in the casual advice of some stranger. But I'll listen to the stranger's advice and put it on file. If he is a maritimer, it is probably based on experience – not just gas. An egalitarian attitude toward information keeps maritime networks open to the smallest economic opportunity. Fishermen are considered extremely conservative, in the conventional wisdom. Actually they are quick to seize the least advantage. Let it be rumored that you have a market for barnacles, and your phone will ring off the wall.

FRIENDSHIP IMPLIES an emotional relationship which supercedes economic advantage. You'd give a friend the shirt off your back. That makes a friend an economic liability. Middle class Americans can afford the luxury of friendship. In a world of limited good it's every man for himself.

It is worth noting that maritime networks, for all their egalitarianism, are not based on friendship. Friendship implies an emotional relationship which supercedes economic advantage. You'd give a friend the shirt off your back. That makes a friend an economic liability. Middle class Americans can afford the luxury of friendship. In a world of limited good it's every man for himself. A friend might ask where the good fishing is. Maritime networks don't rely on trust, or the emotional bonds of friendship, for their durability. They depend on that old individualistic motive: mutual self-interest.

By contrast, disintermediative networks in the larger society are often animated by a certain emotionalism. Old boy networks are colored with the aura of schoolboy camaraderie. Countercultural nets assume a common idealism. Co-ops are supposed to be warm and friendly before they are businesslike.

Friendship can be a fine foundation for economic networking. It provides an egalitarian attitude toward shared information, and a predisposition for fair dealing. Friendship nets generally lack the diversity to be widely utilitarian, however, and network interactions get clouded with emotional expectations. The behavior of traditional economic networks in the maritimes indicates that unswerving practicality may be the best way to share limited resources equally, through personal networks.

Which reminds me, any of you have a good market for barnacles? ■

Disinter-what?

The only economic advice I ever got from my mother, who has shunned a career in favor of a series of diverse short-term jobs, is the warning, "Don't sign your life away." Like many others of my generation, I have lived at the fringes of American capitalism, and tried to eke out as sane a life as possible in a fundamentally insane society.

Richard Gregg described this as Voluntary Simplicity. Then the Nearings told me that I was Living the Good Life. Next Rodale said that I was part of the Organic Revolution. The original **Whole Earth Catalog** explained that I was participating in the Back-to-the-Land Movement. **Mother Earth News** told me I was aiming for Self-Sufficiency. Schumacher said that I was engaging in Buddhist Economics. The **Wall Street Journal** announced that I was part of the Underground Economy.

Now the very latest word, according to Paul Hawken, is that all along I have really been engaged in — the heavens protect us — "disintermediation," which is perhaps the least felicitous description of right livelihood I have yet heard. It is rather disconcerting to open **CQ** to such prose as, "Intermediation created a milieu in which disintermediative forces can newly combine differentiated components into a new economic order."

Isn't the Zen phrase simply, "Chop wood and haul water"?

Sincerely,

Martin Holladay
Sheffield, Vermont

Whole Earth Catalog item requests removal; refused

Dear Mr. Kleiner:

We would appreciate it if you remove all reference to Nasco catalogs from your **Whole Earth Catalog** in the future.

Our catalogs are intended for very specific markets, and we don't wish to make them available free, or on any other basis, to the general public. As you know, these publications are becoming extremely expensive, and we cannot be distributing them to unqualified prospects.

We will not send our catalogs to your readers in the future, and you will be doing a real disservice to them and to Nasco if another Nasco listing appears in your catalog. I would appreciate your acknowledgment of my request confirming that you will not list Nasco in future publications.

Thank you for your cooperation.

Sincerely yours,

Nasco

Gerald A. Mortimer
Executive Vice President
Nasco
Fort Atkinson, Wisconsin

Interesting problem. At issue here is the **Nasco Farm and Ranch Catalog**, *reviewed with great enthusiasm on p. 126 of the* **Next Whole Earth Catalog**, *and the* **Nasco Science Catalog**, *reviewed on p. 571 as being even better than good old Edmund Scientific.*

From Nasco's viewpoint the problem is too many requests for free catalogs from people who do not follow through with orders, especially large orders. The situation is similar to "controlled circulation" trade magazines that are distributed free to commercial subscribers and unavailable to anyone else.

Art Kleiner phoned Mr. Mortimer suggesting that we could list a price — $3 to $5 — for the catalogs which would deter unserious inquiries and help pay for the catalogs. Mr. Mortimer said they did not want to print any extra catalogs and they would not respond further to **NWEC** *readers.*

That seems a shame. Perhaps the company, or one of you **CQ** *readers, could come up with a more mutually satisfactory approach. In the meantime we will continue to list both Nasco catalogs in* **The Next Whole Earth Catalog**, *along with this advice: "For ordering from Nasco you will need to borrow (or print your own) letterhead stationery so that your order appears to come from a ranch, school, or other commercially plausible source."*

We sympathize with Nasco, but our loyalty is to the potential customers for their very good product. You would think theirs would be too. —SB

The Salt Book

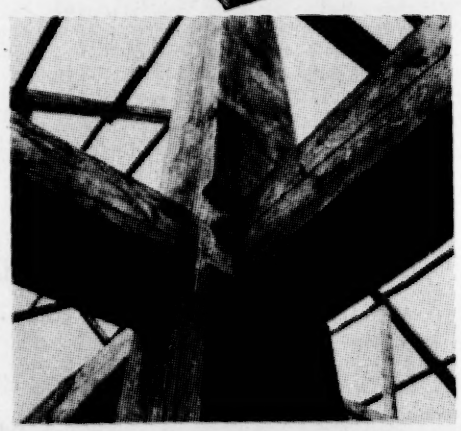
Salt 2

Inspired by Eliot Wigginton's **Foxfire** *series (***NWEC** *p. 570), this set of students talks to New England old-timers for their skills, stories, and continuity to a less flighty time. As well done as the southern fried originals.* —SB

The Salt Book
(Lobstering, Sea Moss Pudding, Stone Walls, Rum Running, Maple Syrup, Snowshoes, and Other Yankee Doings)
Pamela Wood, Editor
1977; 430 pp.
$5.95 postpaid

Salt 2
(Boatbuilding, Sailmaking, Island People, River Driving, Bean Hole Beans, Wooden Paddles and More Yankee Doings)
Pamela Wood, Editor
1980; 433 pp.
$7.95 postpaid

both from:
Doubleday and Company
501 Franklin Avenue
Garden City, NY 11530
or Whole Earth Household Store



"A building deteriorates much more rapidly when it's nailed together than when it's pegged. I think it's a beautiful way to build. It just allows for so much flexibility."

The oak pegs, most of which were about 1¼" x 1¼" x 9", were first pointed at one end with a hatchet (Size pictured here is 3" x 3" x 9".) The pegs were then driven through a series of holes in an iron bar until they became the size needed.

INVESTING SUCCESSFULLY

WHEN YOU DON'T HAVE MUCH TO INVEST ($50 to $5000)

by Christopher H. Stinson

WHAT TO DO? Inflation is presently running 10% to 14% per year, at which rate your dollars lose half their value every five to seven years. If you get 5¼% interest on the money in your checking or savings account, you've slowed the erosion of your dollars to where they'll lose half their present value in 8 to 14 years. But that only delays . . . and does not solve . . . the problem of how to maintain (or even build up) the value of your assets. What if you really do want to save for some goal, for the purchase of a home, or for future financial security? There are many relatively lucrative investments one can make with a minimum of $10,000, and there are many financial advisers who will advise you for fees of $500 to $5000, but what do you do if your entire wealth is less than what a consultant would charge for advice? What do you do if your savings is less than the minimum required for many lucrative investments?

This article offers suggestions on how people with $50 to $5000 can invest their money and receive a return which is slightly higher than inflation. The investments I propose are not guaranteed to save your limited wealth from inflation. For small amounts of money, the only guaranteed investments today are ones which guarantee interest rates lower than inflation rates (and the people who offer those low rates take your money and invest it in ways similar to those proposed here). The investments I propose will not make you rich overnight – even a 100% return on $100 generates only another $100 – and none of these investments are likely to approach a 100% return. However, the investments proposed here are likely to maintain (and slightly improve) the value of the cash you presently own.

Before beginning, I assume you already have health and property insurance before you set aside capital to invest. If you have dependents, you should have term life insurance. If you don't have dependents, you don't need life insurance. Several of the books in "Recommended Reading" give good advice on buying different kinds of insurance. I recommend reading them even if you already have insurance.

Finally, while I believe the investment advice here is sound, I do not advise investing without ferreting out alternative opinions. Think hard about my suggestions, read all the supplementary advice you can (the "Recommended Reading" below, newspapers, magazines, etc.), take a few cheap, short classes in finance and investing, and balance the conflicting advice you are sure to receive. This article is the summary I wish had been available to me when I began searching for productive ways to invest my small savings, and it presents the long-term investments I have settled on.

This financial advice, as sound and succinct as we've ever seen, comes from a zoologist of the University of Washington. He doesn't know we've accepted his article because he's off to "Acklins Island in the southern Bahamas studying ecology of lizards, birds, snails, and gnats." ***–SB***

The Importance of Diversifying Your Investments

Teddy Roosevelt (after being frustrated by a large diversity of economic opinions) said, if you took all the economists in America and lined them head to toe, they'd still point in different directions. Economists today continue to disagree on what the economic future holds, and obviously this makes it difficult to pick a single best investment. Consequently, many investors diversify their investments to minimize the chance of being ruined by any particular future event.

Economic predictions about future events fall into three categories: a) there will be a currency collapse, b) there will be a credit collapse, and c) although there may be times of economic stress

ECONOMIC predictions about future events fall into three categories: a) there will be a currency collapse, b) there will be a credit collapse, and c) although there may be times of economic stress and strain, there will be no economic disasters, and things will stay the same or improve slightly.

A currency collapse is a rapid decline in the value of currency due to high and uncontrollable rates of inflation. The present high rates of inflation cause many people to predict a pending currency collapse. Gold and silver have always been good investments against high rates of inflation and currency collapse. People expecting a currency collapse in the near future recommend gold and silver as an appropriate investment.

A credit crunch occurs when creditors foreclose on debtors unable to meet the cash demands of their creditors. This can arise from the following circumstances. Many speculators borrow money to buy things which they expect to increase in value in the future. If the increase in value occurs soon enough, the speculator sells the thing, pays off the debt, and pockets the profit. However, if prices drop, speculators still must pay off their debts with cash. If the speculator cannot produce the required cash, the purchased item (or some other item) must be sold to pay off the debt. At these times, the relative value of cash increases because things are being sold for a lower price than the speculator would have accepted a short time earlier (i.e., you can buy more things for a given amount of cash). In a credit crunch, this forced selling happens on a small or moderate scale (e.g., the forced sale of the Hunt brothers' silver contracts in early 1980 and the ensuing drop in silver prices), and in a credit collapse, it happens on a large scale. A credit collapse is a possibility today because there are roughly five times more dollars loaned out through banks than there are dollars on deposit,[1] and because many of the borrowed dollars are invested in things which can lose value during a recession (e.g., real estate). A mild credit crunch in one area could cause the value of cash to increase slightly (and the cash value of other things to decrease slightly), which could set off another credit crunch somewhere else, and if this snowballed through much of the outstanding debt, there would be a credit collapse. In a credit collapse, things are worth relatively little cash, and conversely, a little cash will buy a lot of things. An investment strategy against a credit collapse includes a supply of cash (achieved by investing in money market funds which invest only in government securities — see below) and not borrowing extensively.

If things stay the same or improve slightly, the best investments today (for people with limited assets to invest) are probably in stock-based mutual funds. In today's uncertain economy, many investors have been scared out of the stock market (and into real estate, gold and silver, and the money market) and consequently, stock prices are relatively low. If there is no financial collapse in the future, today's stock market represents bargain investments. Even if you know nothing about individual stocks, you can still buy into well-managed collections of stocks (mutual funds) inexpensively.

The investment strategy that seems safest to me attempts to balance all three of these conflicting economic predictions by investing in three different things: U.S. silver coins, money market mutual funds which invest in government securities, and stock-based mutual funds. These three investments are discussed next.

U.S. Silver Coins

Silver and gold are investments which hold their value during times of high inflation rates and pending currency collapse. Inasmuch as silver and gold tend to increase in value when dollars and stocks decrease in value, silver and gold can be a hedge

[1] This happens because banks are required to keep only a fraction of their deposits on hand, so they lend out the rest, which is deposited in another bank, which lends out a fraction of that, which is deposited in another bank, which lends out a fraction of that . . .

THE investment strategy that seems safest to me attempts to balance all three of these conflicting economic predictions by investing in three different things: U.S. silver coins, money market mutual funds which invest in government securities, and stock-based mutual funds.

against currency collapse or a stock market collapse (and the detrimental effect that would have on your holdings). For a person with limited assets (and $50 to $5000 counts as limited assets in the high rolling world of finance), silver is a better investment than gold because units of silver can be bought (and sold) for smaller amounts of cash than can units of gold. The best way to buy silver is U.S. silver coins (e.g., dimes, quarters, and half dollars minted before 1965 — these are 90% silver and easily bought or sold).

Advantages. 1) These U.S. coins are easily recognized, and easily bought and sold. 2) U.S. silver dimes, quarters, and halves are very unlikely to be counterfeited. Counterfeiters are working on gold coins because they're more profitable to counterfeit. 3) Because one can buy more silver coins than gold coins for a given amount of cash, it's easier to sell off small parts of your holdings if you own silver than if you own gold. If you buy two gold coins, you can sell only 0%, 50%, or 100% of your investment. If you buy 100 silver coins, you can sell off smaller fractions of your holdings at any time. 4) Silver prices are low right now. Incidentally, don't worry about the daily and monthly fluctuations in silver/gold prices. You're investing as protection for your cash and stock market investments, and not for quick short-term profits. 5) Silver is a good investment because 75% of the silver mined today comes from mines which mainly mine copper, zinc, or lead. Silver is produced as a byproduct. Hence, large increases in the value of silver don't necessarily make it more profitable for the mine owners to mine more silver. This means high silver prices won't necessarily be followed by increased production of silver (which would act to lower prices again). All this is not true for gold, which comes from mines mining mainly gold.

Disadvantages. 1) Silver (and gold) prices tend to parallel changes in the rate (or expected rate) of inflation. They provide protection against loss of value of investments which lose value when inflation increases, but they are not something you should invest everything in. 2) You need a place to store or hide the gold or silver. Many people use safe-deposit boxes and other people bury the stuff in the South Forty. I do the former and carry insurance on the contents of my safe-deposit box. Remember that if there ever is a real econmic disaster, the banks may close in which case bank safe-deposit boxes would be inaccessible. Consider storing your gold or silver in a safe-deposit box at a private vault company (check the Yellow Pages for one near you).

Investing. You can buy U.S. silver coins through precious metals dealers or through most coin shops (check in the Yellow Pages again). Call around to several places to find today's rate, and take the cheapest deal you can get. It's cheaper to buy in quantity ($10, $50, or $100 face value) than it is to buy individual quarters.

Keep an eye on your change. Nickels minted from 1942 to 1945 (35% silver), half dollars minted from 1965 to 1970 (40%), and dimes, quarters, and halves minted before 1965 (90%) all are worth more than face value because of their silver content. Most of these coins are now out of circulation, but you can still find a few silver nickels (currently worth about 50 cents each). I recently went through 24 $2 rolls of nickels and found two silver nickels. Not a great return for the time invested, but there are still a few out there waiting to be picked up by someone.

Money Market Mutual Funds

The "money market" is made up of large institutions which need to borrow money for short periods of time (as low as one day) and people or institutions which lend the money. The potential borrowers (and their IOUs) are the federal government (Treasury Bills and agency notes), corporations (commercial paper), and banks (letters of

credit and certificates of deposit). Investors with $10,000 or more can loan their dollars to these borrowers at the relatively high money market rates. Investors with less than $10,000 can benefit from the high money market rates through money market mutual funds. Money market mutual funds pool the funds of many small investors, loan the money out in short-term loans, and pay the interest to the investors (after subtracting a small management fee).

Advantages. 1) At present, money market mutual funds are returning interest rates (13% to 17%) which are above present estimates of inflation (10% to 14%). 2) Cash invested in money market mutual funds is very accessible. One can withdraw funds from a money market mutual fund any time with no penalties (unlike the bank-sponsored Certificates of Deposit which yield similar interest rates). 3) The fund sends you checks that work just like checking account checks except that the checks must be for some minimum amount (usually $500). Investors can write checks on the balance in their fund account, and interest is paid daily until the checks clear. 4) One can invest in money market mutual funds which invest only in Treasury Bills and agency notes (both backed by the federal government). Even in the event of economic hard times (when corporations might default on their obligations), an investor would get his or her dollars back from a money market mutual fund which invested exclusively in government securities.

Disadvantages. 1) Many money market mutual funds have a minimum initial deposit requirement, but some have low or nonexistent initial deposit requirements. Some of these are listed in Table 1. 2) Your funds are not insured (as are many bank deposits), but by choosing money market mutual funds which invest only in government-backed securities, one can effectively circumvent this problem. 3) Interest rates in these funds fluctuate a small amount every day (with daily fluctuations in the money market interest rates), so these funds are not necessarily a good long-term investment. It's possible for money market rates to be lower than passbook savings rates at banks (they're certainly not now, but they were 10 to 20 years ago, and could be again sometime). Money market, mutual funds are a place to keep cash dollars you don't want to tie up in less liquid investments. 4) Sylvia Porter says you may have less protection against check forgery in a money market mutual fund than in a bank checking account, so guard your check supply carefully.

Investing. Put your former savings account, and

Table 1. Names, addresses, and descriptions of several money market mutual funds. These funds are characterized by either low minimum investment requirements or by the fund investing exclusively in government securities.

Fund Name, Address and Phone	**Minimum Investment Initial/Subsequent**	**Minimum Check You Can Write**	**Annualized Yield Over Week Ending 6 Mar. 81**	**Invests in Government Securities?**
Alliance Capital Reserves 140 Broadway New York, NY 10005 (800) 221-5672 (212) 425-4210 call collect in NY	None/None	$500	15.76%	Some
Franklin Money Fund 155 Bovet Road San Mateo, CA 94402 (800) 227-6781 outside CA (415) 574-8800 collect	$500/$100	$500	15.93%	Some
Midwest Income Investment Co. 508 Dixie Terminal Cincinnati, OH 45202 (800) 543-0407 (513) 579-0414 collect	$1000/$50	$250	14.71%	Exclusively
Capital Preservation Funds I & II 755 Page Mill Road Palo Alto, CA 94306 (800) 227-8380 (800) 982-6150 in CA	$1000/None	$500	14.31% & 14.29%	Exclusively
First Variable Rate Fund for Government Income, Inc. 1700 Pennsylvania Ave., NW Washington, DC 20006 (800) 424-9861 (202) 296-5040 collect	$2000/$250	$500	16.24%	Exclusively

(if you're so lucky) any checking account dollars not needed for the next few weeks, in a money market mutual fund buying exclusively government-backed securities. This gives you a high interest rate on your cash, yet access to real cash dollars should a personal emergency or a large scale credit crunch occur.

If possible, don't use money market mutual funds which invest in corporate or bank securities. You risk losing your cash to collapse of the corporations and banks, and gain an only slightly higher interest rate. You can achieve a notably higher return (with little more risk) by investing instead in stocks or stock-based mutual funds.

Stock-based Mutual Funds

The stock market is where stocks in various companies are bought and sold. There are several stock markets (the New York Exchange, the American Exchange, etc.) and each stock market has many stocks which can be bought or sold there. To make money in stocks, you simply buy a stock at a relatively low price (and pay your broker for the transaction), and then sell the stock at a higher price (and pay your broker for the transaction). The only hard part is picking the particular stock and the right times to buy and sell.

You can get around the problems of "which one" and "when" by hiring a professional manager to do your choosing and timing for you, and, pleasantly enough, this costs much less than you might think. There are many managed "mutual funds" which invest in the stock market. These stock-based mutual funds pool the resources of many investors, buy and sell stocks, send you (or reinvest) your capital gains and dividends, and charge a modest management fee. A few funds ("load funds") charge an initial entrance fee, and many funds ("no-load funds") charge no such fee. If you ever want to sell your shares in the fund, you write the fund, and they send you a check for the shares' current value.

At this point, I should mention that over 80% of all managed stock-based mutual funds do worse than the stock-market average. That is, most trained fund managers do slightly worse than if they bought stocks randomly and sold them one year later.[2] This relatively poor performance does not mean one should avoid stock-based mutual funds. It simply means you have to pick one of the funds that regularly does better than average.

And how do you discover what a fund's past performance has been? You write (or call) the fund for a prospectus. The prospectus gives the fund's past performance, a listing of its current investments, a description of the fund's investment policies, and an application form.[3] Several stock-based mutual funds with good records are listed in Table 2. Addresses (and phone numbers — many toll-free) of other mutual funds are available from The Investment Company Institute (1775 K Street, NW, Washington, DC 20006; ask for the membership list of the investment companies division) and from No-Load Mutual Fund Association (Valley Forge, PA 19491; this lists only no-load funds).

Advantages. 1) By investing in a large portfolio of stocks (and not just in one or two stocks), you reduce the risk of doing poorly because of one stock's poor performance. 2) By choosing a fund with a good past record, you increase your chances of doing well over the next several years. 3) If you bought stock outright, you would have to pay a broker's fee for every transaction (both buying an and selling). On a per share basis, these fees are most expensive for small transactions.

As a general rule of thumb, for small investments, a stock needs to increase 10% in value just for you to break even after paying the broker's fees. Stock-based mutual funds pay relatively little in broker's fees (on a per-share basis) because they buy and sell stock in large quantities. By buying into a stock-based mutual fund, you drastically lower the cost of buying and selling stock.

Disadvantages. Your investment is in the stock market. If there is a currency collapse or a credit crunch, stock prices will probably plummet. However, if the doomsayers are wrong, you stand to receive a much higher return on your assets than if you had invested in silver (against a currency collapse) or currency (against a credit collapse).

Investing. The time to buy into the stock market is when everyone is selling, stock prices are dropping, and the future looks bleak. The time to sell stocks (for short-term profit) is when everyone is buying, stock prices are rising, and the future looks wonderful. Nearly everyone agrees with this

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2 The "efficient-market theory" explains this by noting that information about stocks is disseminated so quickly today that stock prices react almost instantaneously to any news. Consequently, intensive research doesn't make it easier to predict which stocks will increase greatly in value. Most thoughtfully chosen portfolios will yield only the average yield for all stocks, and after operating costs are subtracted, most funds yield slightly less than the stock market average.

3 All mutual fund prospectuses are required by law to carry a statement which reads like a warning on a cigarette package: "These securities have not been approved or disapproved by the Securities and Exchange Commission nor has the Commission passed upon the accuracy of this prospectus. Any representation to the contrary is a criminal offense." Don't be scared off by these words. Even the most well-run funds must print that statement on their prospectus. It means only that the fund has not been investigated by the SEC.

Table 2. Names, addresses, and descriptions of two stock-based mutual funds. These funds are characterized by consistently high returns on investment relative to most stock-based mutual funds, and by relatively low minimum investment requirements.

Fund Name, Address and Phone	Minimum Investment Initial/Subsequent	Sales Commission on Investments?	Range of Annual Increase Over Last Five Years*
Templeton World Fund 41 Beach Drive, SE St. Petersburg, FL 33701 (800) 237-0738	**$500/$50**	**8½%**	**21.8% to 30.9%**
Twentieth Century Growth Fund 605 West 47th Street Kansas City, MO 64112 (816) 531-5575	**$25/None**	**None**	**13.9% to 106.8%**

*** Including dividends and capital gains.**

advice, but few can make themselves do it. It's too hard to go against the herd. It's difficult to invest when things look "bad," but if things improve in the future, you're likely to receive handsome benefits for investing now (and if things don't improve in the future, hopefully your silver and cash holdings will more than balance out your stock losses).

Diversifying Your Investments

So what is the "right" amount to have invested in each of U.S. silver coins, stock-based mutual funds, and money market mutual funds? The only simple answer to this question is, "Balance your investments so that you sleep comfortably at night." For peace of mind, many financial advisers recommend having two to three months of living expenses in cash or its near equivalent (e.g., money market mutual funds). Alternatively, if you feel a currency collapse is imminent, you'll want to have everything in silver (and possibly gold) except for emergency cash kept in a money market mutual fund. If you are uncomfortable with the fact that you could lose some of the money put into silver coins or stock funds, you should have most (or all) of your funds in money market mutual funds. I have settled on a 20-60-20 split of my assets between silver coins, stock funds, and money market funds, respectively. I am comfortable with this combination because I feel reasonably assured that a major part of my assets will increase in value with almost any economic scenario, and (with the 60% in stock funds) because I believe stocks generally will show a large increase in value over the next five to ten years. Alternatively, some of my most respected friends are somewhat wary of the stock market, and have opted for a 10-10-80 allotment of their money. The final decision here is yours alone, and I can't advise you further from the typed page. I have presented information which I hope will aid you in this decision, and the books recommended below (especially those by Venita Van Caspel and Burton Malkiel) should also help a lot. The final section below is a financial miscellany which includes the recommended reading.

Miscellaneous

Checking Accounts. Nearly everyone needs a checking account for daily convenience. However, nearly everyone should have their checking account at a credit union and not at a regular bank. Regular banks generally pay 5¼% interest on checking account balances if you maintain a substantial minimum balance (either in checking or savings). Credit unions generally pay 7% interest on checking accounts (which doesn't match inflation, but it's better than banks) and have no minimum balance requirements greater than $5 to $10. Banks that pay 5¼% interest on checking accounts with a $500 minimum deposit can collect about $50 per year by investing your $500 in the money market. That $50 per year could be yours if you put the $500 in a money market mutual fund and your checking account in a credit union.

Credit unions do have membership requirements (working for a certain employer, belonging to a certain organization, etc.), so you can't join any credit union you want to. Look under "Credit Unions" in the Yellow Pages and call around to find a credit union you can join (or ask you friends what credit unions they belong to).

Stock Brokers. Under most circumstances, people with limited capital should not rely on a broker for investment counseling. Broker's fees for small accounts can often be larger than the account's profits, and additionally, brokers charge for things you could do yourself for free (e.g., investing in a money market mutual fund or a stock-based mutual fund). However, you do need to deal with a broker to sell or buy shares of stock. Your fees for this transaction can be reduced 50% or more if you sell or buy through a discount brokerage firm. Discount brokers don't give you the advice ("buy now," "sell now," "go short now," etc.) which full-price brokers do, but this may not even be a

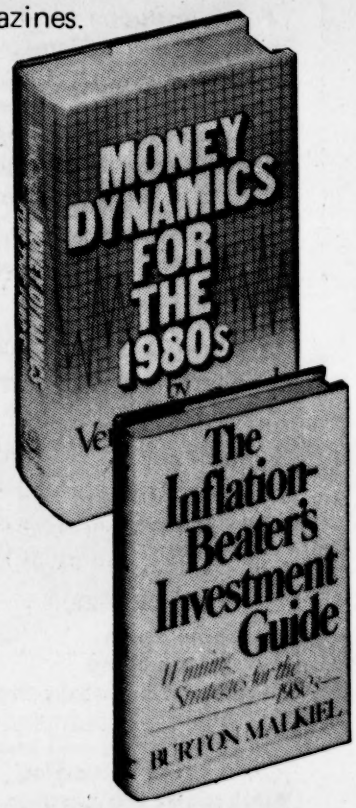
disadvantage. Critics of full-priced brokers complain brokers' advice often generates many commissions and few profits.

One discount brokerage firm is Discount Brokerage Corporation (67 Wall Street, New York, NY 10005; the toll-free number for information is 800-221-4257). Addresses of other discount brokers can be found in ads in your local paper or in the **Wall Street Journal**.

Retirement Funds. Retirement investment programs are often an unappreciated item which can save you many tax dollars over the years. There are two kinds of tax-free retirement investment programs: Individual Retirement Accounts (IRAs) and Keogh plans. If your employer does not contribute funds to a pension plan for you, you can start a tax-free IRA for yourself. If you are self-employed (even in addition to another job where you do have a pension plan), you can start a tax-free Keogh plan for yourself. Why is this so good? Two reasons. First, any money you invest in an IRA or Keogh plan is subtracted from your taxable income, i.e., you don't pay tax on the principle (until you take it out of the fund). Second, the interest accrues tax-free (until you take it out of the fund). You can take money out of your account without penalty after age 59½ (and you have to take it all by age 70). If you take money out before you're 59½, you have to pay a penalty tax of 10% on the amount taken out and the remaining 90% of the amount taken out is taxable as ordinary income.

However, even though you have to pay a 10% penalty to use the money before you're 59½, the initial tax-free conditions can make it worthwhile to set up an IRA or Keogh whenever you don't plan to use the money in the next several years. Consider an investor in the 20% tax bracket investing $100 in something that returns 15%. With a retirement program, you invest $100 ($20 of which was "given" you by IRS) and a year later you have $115. With no retirement program, you pay $20 taxes and invest $80, you receive $12 interest next year, pay $2.40 tax, and end up with $89.60. After 4 years, even with the 10% penalty and 20% tax, you would have more money available in your retirement program than you would have in a taxable investment. After 30 years, you would have about three times as much in your retirement program as you would in a taxable investment.

IRS puts limits on the amount you can invest in a retirement program in any one year. You can invest 15% of your earned income up to $1500 per year ($1750 if you're married and your spouse doesn't work for pay) into an IRA. For Keogh plans, the maximum contribution is 15% of your self-employment income up to $7500 per year. IRAs and Keoghs can be invested in any program that has a bank or brokerage house willing to act as legal custodian for the account. Most stock-based mutual funds have such programs, and retirement programs based on annuities, bonds, gold, silver, stamps and coins also exist. Information on these can be obtained from the stock-based mutual funds and from advertisements in newspapers and financial magazines.



Recommended Reading. Two books, more than any others, have guided me in learning about investing my money. These are Venita Van Caspel's **Money Dynamics for the 1980s** (1980; $15 postpaid from Prentice-Hall, P.O. Box 500, Englewood Cliffs, NJ 07632) and Burton Malkiel's **The Inflation-Beater's Investment Guide** (Winning Strategies for the 1980s) (1980; $9.95 postpaid from W.W. Norton and Company, 500 Fifth Avenue, New York, NY 10010). Van Caspel's book is a general and thorough discussion of investment possibilities. Malkiel's book concentrates on (but is not limited to) investing in stocks, bonds, and associated mutual funds. I highly recommend both of these. Neither book discusses day to day uses of money (budgeting, buying groceries, car insurance, etc.) and as supplements I recommend Jane Bryant Quinn's **Everyone's Money Book** (1978, 1979; $9.95 postpaid from Delta Books, c/o Montville Warehousing Company, Change Bridge Road, Pine Brook, NJ 07058), Andrew Tobias's **The Only Investment Guide You'll Ever Need** (1978; $2.75 postpaid from Bantam Books, 414 East Golf Road, Des Plaines, IL 60016) — it's not the only one you'll ever need, but it complements the others nicely — and Sylvia Porter's **New Money Book for the 1980s** (**NWEC**, p. 302). If you look through these five books, you'll be well on your way to being a good manager of your wealth.

None of the above authors expect a national economic disaster in the near future. To get another view of things, you may want to read Howard Ruff's **How to Prosper During the Coming Bad Times**, Douglas Casey's **Crisis Investing**, Jerome Smith's **The Coming Currency Collapse**, Paul Hawken's article "What's Economical?" in the Summer 1980 **CoEvolution Quarterly**, or Ashby Bladen's **How to Cope with the Developing Financial Crisis.** Bladen and Hawken argue we're heading for a credit collapse, and the other authors believe a currency collapse is imminent. These books temper the advice of the first group of authors. ■

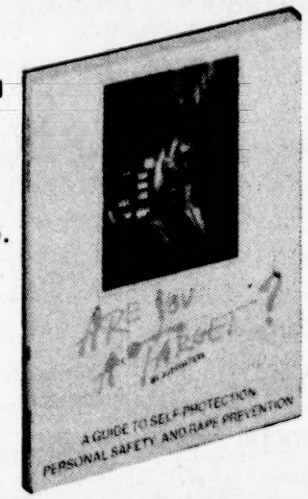
Are You a Target?

Here's a gruesome, invaluable book on self-defense. Fein says that body language can render you vulnerable or not. Having a secure self-image, a sense that you have a right to your freedom too, is how to begin not being a target. Then: don't get raped, get angry. Yell angrily. Don't flinch at incapacitating the attacker. Fight dirtily.

Fein's instructions for resistance and counterattack look effective and demand practice. In order to get it you need to work out with a supportive partner. If you can't swing that, take (or start) a class. And take Fein's advice on securing your household, psyching out dark or lonely places, and protecting yourself from theft and assault on the job in order to avoid dangerous encounters.

It's all prudent, and enough to make me want to move to Japan. Developing a guerilla mentality is a hell of a price for survival. —*Stephanie Mills*

Are You a Target?
(A Guide to Self-Protection, Personal Safety, and Rape Prevention)
Judith Fein
1981; 146 pp.
$8.95 postpaid from:
Wadsworth Publishing Co.
10 Davis Drive
Belmont, CA 94002
or Whole Earth
Household Store



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Use Your Intuition. Nobody knows you better than yourself. If you sense that something is wrong in a situation, it is! Suppose a man in your office suggests that you stop for a drink after work. You tell him that you can't this particular evening. He still tries to convince you. You feel uneasy. When an alarm goes off in your mind telling you that something is not exactly right, then something *is not exactly right.* Learn to listen to your feelings and act on them. If someone pushes just a little too hard, doesn't seem to respect your wishes or feelings, treats you more like an object than a person, or seems to bear a grudge against you, stay clear. This concept of trusting your intuition is backed by a study in rape prevention and resistance conducted by the Queen's Bench Foundation in San Francisco. The Queen's Bench found that women who avoided being raped were more likely than victims to trust feelings of suspicion, even though they didn't know why they felt uneasy.

●

If you decide to run, do it suddenly and make as much noise as possible. Yell "Fire!" as you run, rather than "Help!" Yelling "Fire!" may be helpful in bringing immediate assistance, whereas yelling "Help!" may bring no assistance at all. If at all possible, run to where there are people rather than to an isolated area. If you are being chased and run to an occupied house, consider smashing a window (use a shoe, rock, or any heavy object). Banging on the door for help takes time and may not bring any assistance. Often, people do not want to become involved. Although smashing a window is not legal, you may be saving your live. Breaking the glass will attract the immediate attention of the occupants (who most likely will call the police) and may act as a deterrent to the person chasing you. If you cannot find an occupied building, consider breaking a store window to set off a burglar alarm. This, too, may act as a deterrent.

Counter attack by gouging the attacker's eyes with your your thumbs.
He will probably respond by trying to grab your wrists. As he does so, knee him in the groin.

←

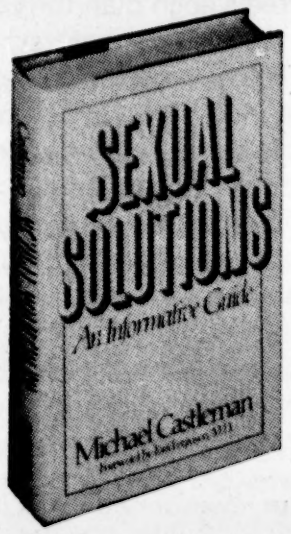
Sexual Solutions

Finally — a book written by a man for men, which says what we women have been trying to tell them lo these many years until by now it's a cliché: it's not how long you make it, it's how you make it long. Castleman, a medical journalist, describes how to do it with humor, sensitivity, and thoroughness. He covers obstacles to problem-free lovemaking, ejaculation and erection problems, what turns women on and off, what to do if the woman you love gets raped, and how to develop or enhance your sensuality. The book also deals with contraception, sexually-transmitted diseases, and basic anatomy. It even includes a national directory of sex therapists.

Once or twice I've had the pleasure of a lover who understood that sex wasn't a job to get done, but rather a game to play. The lover always laughed at my suggestion he give courses on lovemaking to other men. Well, Castelman's done it between the covers of his book. I pray for a wide, wide distribution!

Castleman, by the way, is associate editor of my favorite medical magazine called **Medical Self-Care** *(NWEC p. 322).*
—*Carolyn Reuben*

Sexual Solutions
(An Informative Guide)
Michael Castleman
1980; 286 pp.
$12.95 postpaid from:
Simon and Schuster
Attn: Order Department
1230 Avenue of
the Americas
New York, NY 10020
or Whole Earth
Household Store



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A widely held notion about lovemaking is that it is divided into three distinct stages: foreplay, intercourse, and afterglow. The very word "foreplay" suggests that it happens before the "real thing." However, the idea that foreplay precedes actually "doing it" is an indirect cause of many men's sexual difficulties. There are no such things as foreplay and afterglow. There is only loveplay.

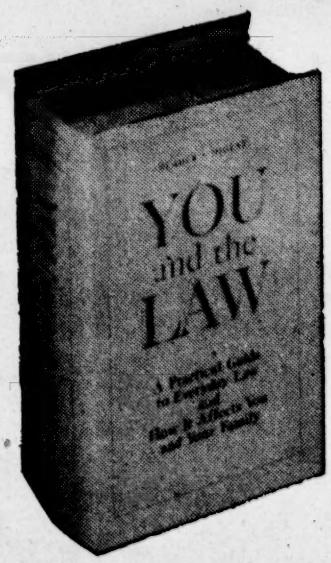
●

A major concern about oral ejaculation as birth control is the safety of swallowing semen. Semen contains nothing unhealthy. Like the rest of the human body, it is mostly water. Its other components include: protein, in sperm and enzymes; fructose, the sperm-nourishing sugar found in fruit; citric acid, the substance in citrus fruit that prevents scurvy, small amounts of zinc, an essential mineral; and traces of cholesterol. Far from being harmful, semen has some nutritional value, though this should not be overemphasized. It is also nonfattening. Doctors estimate that the average ejaculate contains no more than 25 calories, about as much as a raw carrot.

You and the Law

A very handy reference in a field where nothing else will really do. (Yeah, you can call a lawyer, but it will cost — as in the apocryphal legal bill, "Crossed street to greet client; it wasn't you; $50.") This undecorated volume is amazingly comprehensive, anticipating at least the first generation of questions you might have in everything from traffic accidents to will making (complete with tables of variations from state to state). I was unsure recently about my understanding of what constituted an oral contract and what was involved in forming a general partnership. **You and the Law** *cleared up both questions immediately.* —SB

You and the Law
(A Practical Guide to Everyday Law and How It Affects You and Your Family)
Reader's Digest Editors
1971, 1977; 863 pp.
3rd Edition
$17.50 postpaid from:
Book Department
Reader's Digest
Pleasantville, NY 11570
or Whole Earth Household Store



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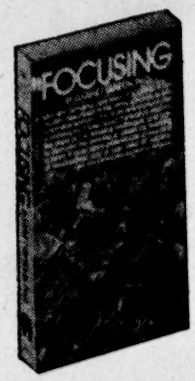
A partnership begins with an agreement, which can be spoken, written or simply a matter of understanding. Good friends who decide to form a partnership may not feel it necessary to reduce their arrangement to writing. Experience, however, proves that to avoid misunderstandings in the future, it makes sense to draw up an agreement, with the help of an attorney, outlining the basic features of the partnership. This document should describe the proposed business in detail. It usually deals with partnership name, names of partners, purposes of the partnership, location of the business and investment or contribution of each partner (realty, equipment, cash, services). It also provides for the partners' sharing of losses and profits, the responsibilities and powers of each (particularly with regard to making purchases and disbursing the partnership's money), and voluntary or compulsory retirement. Finally, the agreement should provide for arbitration or other resolution of disputes among the partners, and for the dissolution of the partnership. (The dissolution of a partnership is discussed in section 412.)

Focusing

Some years ago Dr. Gendlin began to research a crucial and generally ignored question — why does therapy succeed or fail? He found that it had nothing to do with the therapist, method, or school of therapy. Rather, it involved the patient, and what s/he did inside him or herself during therapy. Gendlin isolated this internal process and formulated a technique to teach it. This technique is called focusing.

In this book Dr. Gendlin presents focusing; what it is and how to do it. It can be learned remarkably quickly and then practiced alone, with a friend, or a therapist. Focusing is simple and direct as Dr. Gendlin presents it, and apparently very effective. It looks as though this technique can be for mental health what brushing and flossing are for dentistry. —Bill Annett

Focusing
Eugene T. Gendlin, Ph.D.
1978, 1981; 178 pp.
2nd Edition
$3.50 postpaid from:
Bantam Books
414 East Golf Road
Des Plaines, IL 60016
or Whole Earth Household Store



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FOCUSING MANUAL

1. Clearing a space What I will ask you to do will be silent, just to yourself. Take a moment just to relax. . . . All right — now, inside you, I would like you to pay attention inwardly, in your body, perhaps in your stomach or chest. Now see what comes *there* when you ask, "How is my life going? What is the main thing for me right now?" Sense within your body. Let the answers come slowly from this sensing. When some concern comes, DO NOT GO INSIDE IT. Stand back, say "Yes, that's there. I can feel that, there." Let there be a little space between you and that. Then ask what else you feel. Wait again, and sense. Usually there are several things.

2. Felt sense From among what came, select one personal problem to focus on. DO NOT GO INSIDE IT. Stand back from it.

Of course, there are many parts to that one thing you are thinking about — too many to think of each one alone. But you can *feel* all of these things together. Pay attention there where you usually feel things, and in there you can get a sense of what *all of the problem* feels like. Let yourself feel the unclear sense of *all of that.*

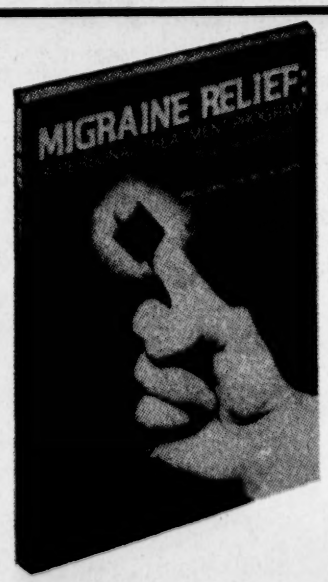
3. Handle What is the quality of this unclear felt sense? Let a word, a phrase, or an image come up from the felt sense itself. It might be a quality-word, like *tight, sticky, stuck, heavy, jumpy,* or a phrase, or an image. Stay with the quality of the felt sense till something fits it just right. . . .

Migraine Relief

An easy to read, chatty workbook that allows physician-diagnosed migraine sufferers to learn to control bloodflow to the hands and ultimately to the head using a biofeedback device called a biotic band (a liquid-crystal thermometer which wraps around a finger).

Readers also learn to become aware of "migraine triggers" in their environment, and to avoid them or deal with them effectively.

In a study of the program's effectiveness (available from the author), subjects using this treatment program experienced a 62% decrease in weekly headache frequency over a six-month period. —Tom Ferguson, M.D.



Migraine Relief
(A Personal Treatment Program)
Robert J. Kohlenberg
1980; 120 pp.
$21.95 postpaid
(includes biofeedback device)
from:
BSMC Publishing
3216 Northeast 45th Place
Suite 301
Seattle, WA 98105

Married female, age 38

I can't bear the pain any longer.
I'm tired, discouraged and unhappy.

HOW NOT TO COMMIT SUICIDE

Instead of oblivion and relief, 9 out of 10 suicide attempters live through various ordeals of intense physical suffering, stomach pumping, lasting internal injury, brain damage, bureaucratization, moral condemnation, uninvited psychiatry . . . and sometimes new attitudes about life.

by Art Kleiner

This article arose from a conversation among the directors of our foundation, Point. Michael Phillips and I wanted to publish information on how to commit suicide. Hiding such information is a vicious taboo, we opined in high libertarian dudgeon. Richard Baker, abbot of the local Zen Center and one who sees a lot of disturbed people remarked drily, "If the information were generally available, a fellow I talked with last week would be dead now. He wouldn't do it this week I think. The information that people need is how <u>not</u> to commit suicide. They think if they take an overdose of sleeping pills they'll just go to sleep and never wake up. Instead they wake up choking on their vomit, and there's the emergency room and stomach pumping and brain damage, and it's the opposite of relief for their suffering. People try all sorts of things that don't work, all horrible."

CQ staffer Art Kleiner got the assignment and immersed himself in it with his customary zeal. (He wants noted that "four people who have worked with suicidal people helped me articulate the article, even though they weren't directly quoted in it – Mary Deems, Ron Jones, Larry Cohen, and Ben Campbell.") Journalist Kleiner also adds, "This article was probably the most rewarding I've ever done, nightmares and all." *–SB*

RESURRECTION, the voyage to the land of the dead and back again, is common enough in old legends and myths and in the experiences of people who live through a near-terminal illness or accident. But that journey is also made daily in hospital emergency rooms.

About 30,000 people kill themselves in the United States each year. An estimated ten to forty times that number try to kill themselves but don't die, either because they don't really want to die or because they don't know how.

I didn't realize the impact of that statistic until I talked to friends and acquaintances while researching this article. Everyone I talked to, whether I interviewed them or casually brought the subject up, knew someone who had attempted suicide.

Some of the stories are tragic. A friend of a friend jumped from a high building and hit a parked car several stories below. She broke most of her bones and punctured several of her inner organs but didn't die. Instead she was wheeled, conscious, to the local emergency room, her most privately conceived act announced to the world by the ambulance siren. She spent the next year in bed, much of it in a hospital ward allocated to critically ill victims of violence, her still-suicidal mind the only functioning part of her body. *more →*

HOW NOT TO COMMIT SUICIDE

(All these common techniques
are unreliable and have often terrible
effects on the survivor.)

Don't overdose on aspirin, Tylenol,
caustics such as lye or oven cleaner,
psychiatric drugs such as Thorazine or Elavil,
tranquilizers, or sleeping pills.

Don't slash your wrists.

Don't shoot yourself.

Don't jump from a not-very-high place
or try to hang yourself.

This article about what happens to people who attempt to kill themselves started as a brief review of a pair of new publications aimed at the terminally ill. One booklet, the widely-publicized but little-read "death manual," **How to Die With Dignity** (reviewed on p. 110), contains a chart of lethal doses of different types of pills and methods of deliberately ensuring a calm death in a suicide attempt. It was published by Scottish Exit, a northern spinoff of British Exit, the London group that has in the past year sought and won more than its share of controversy. Two of the members of the London group are now facing trial on nine charges of aiding people to kill themselves.

The other book, **Let Me Die Before I Wake** (also reviewed on p. 110), is a collection of case histories of people who have committed suicide or attempted it and failed, with detailed descriptions of the methods used. It was published this spring by a Los Angeles group called Hemlock, which also counsels terminally ill people on their other options. The book's author, Derek Humphry, is a British journalist who wrote the sentimental memoir **Jean's Way** (1978; $5 postpaid from Hemlock, Suite 101, 2803 Ocean Park Boulevard, Santa Monica, CA 90405), the first popular book to describe what Hemlock calls "Self-Deliverance." Humphry's first wife, Jean, discovered that she had bone marrow cancer and took a fatal drug overdose as she was on the verge of becoming immobile.

"Perhaps 10 percent of our members are terminally ill," Humphry told me. "The great fear of the rest of our members is that they may face a painful, awful death one day. If they can say, 'I have this cache of pills and good advice on how to use them,' they can feel prepared if they eventually do fall ill, and in the meantime can get on with the business of living."

So when I went to emergency room physicians, paramedics, and therapists, I expected to hear of many people who might have needed this information – people who, faced with a grim illness and no alternatives to it, had tried to kill themselves and ended in the emergency room instead. Wrong. People who plan deliberate suicides usually succeed – as Humphry said, everything in the suicide manuals can also be found in medical textbooks. People in emergency rooms are usually people who attempted suicide on impulse, in temporary despair or anger. Many decide later that it was a mistake.

They are the people whose fate has been thrown into sharper focus by the existence of these new books. The argument between Exit and the British suicide prevention groups played with much commotion in the press and in conversation. The books should not be published, the suicide prevention people said, because temporarily distraught people would use them impulsively and die, where without them they would probably live. Yes, said the voluntary euthanasia groups, but preparing for a rational, planned suicide as the books encourage, and thinking out its ramifications (like who will be affected by it) makes people less likely to kill themselves impulsively. Yes, but the context of the how-to-die information shows suicide as an easy way to solve problems, and doesn't encourage people to look for other options first.

Yes, but the books are available only through the mail, with a three-month waiting period, just to discourage such abuse. Yes, but with easy xerox access no one can guarantee the books won't find a subterranean following. Yes, but banning the booklet is equally manipulative – it keeps people from the option of dying easily unless they

This and other suicide notes on the following pages were gathered at coroners' offices by a suicidologist/psychiatrist who asked to be anonymous. He edited identifying details out of the compiled manuscript, and we changed the names. But the text of each letter plus the age and sex given are real. All these people did kill themselves. Were they ambivalent about it? About half the hundred or so letters we saw seemed to have some element of doubt.

(There's a strange story in computer folklore about a suicide note that appeared late one night on the Arpanet computer network. The other people on the network had regularly corresponded with the man, but always under the name of his lab not his own name. When the message saying he was killing himself flashed on the screen they tried to call the police, but nobody could identify him, and he died.) *–Art Kleiner*

are lucky enough to find people who will help them. Yes, but they might find people who will help them avoid the pain tomorrow, if they aren't encouraged to end their lives today. Yes, but . . .

The debate is fascinating to follow, because usually talk of suicide is hushed up, for fear it will create more suicide or someone will be held responsible. Psychologist intern David Gruder worked in a California high school a few years ago when one of the popular seniors killed himself. "In the next two weeks everybody pulled me aside – students, teachers, the principal – to ask me what they could have done, what he meant by it. But nobody said anything out loud to each other. Finally I gave a talk at the library about suicide and suicide prevention, and I had to argue with six levels of school administration to do it. I had to tell them the clinical truth is that talking about suicide often neutralizes it. Ignoring it always paves the way for more attempts."

When a genuine myth rises into consciousness, Ursula Le Guin wrote in **The Language of the Night** (Spring '81 **CQ**, p. 54), the message is always: You must change your life. Each suicide attempt, I'm convinced, carries that message: to the person who tries it, to the people who are close to that person, and to the rest of us as a society. I think what happens after a suicide attempt is a sort of autopsy of what's best and worst about our culture. Here is some of that story.

LIKE THE OTHER 200 SUICIDE prevention telephone hotlines in the U.S., the Marin Suicide Prevention Center holds several 11-session training classes a year. I sat in on one of the introductory sessions. It looked like any suburban adult education class – sixty fidgety people of all

Married female, age 59

Dear David,

After six weeks of streptomycin shots and a total of eleven weeks of rest in bed we have conclusive proof that the ulcers in my bronchial tubes have not healed. The short period of the streptomycin inhalations could not have brought on the results if the ulceration had even partially healed. To try further would mean many more months of bed rest -- more shots and inhalations -- I can't remain at the hospital for the winter months and a prolonged stay at a rest home is out of the question. I did some figuring -- the weekly rate there -- the amount of streptomycin for shots and inhalations plus the doctor's weekly visits would total to over $200 a week -- I can't bleed my family for any such amount of money, and that means that as soon as the money I have in my checking account runs out I would have to return home -- back to the same conditions which caused me to go downhill so steadily. It's a vicious circle from which there seems no escape. I could of course use up the money from the sale of our furnishings and silver as well as some I put aside for the furnishing of our home -- but all it put together would be like a drop in the bucket -- besides I am now convinced that my condition is too chronic and therefore a cure doubtful.

All of a sudden all will and determination to fight on has left me. I have long ago prepared myself for the time when I reached the end of the trail. I feel calm and at peace and grateful that I can go to sleep painlessly. I feel justified in terminating a life which no longer holds any hope of having the essentials which make it worth living -- I did desperately want to get well -- I still had much to live for -- hope for recovery -- hope of a reunion with the children -- work which I loved and which could have given me financial security and great satisfaction. But it was not to be -- I am defeated and exhausted physically and emotionally.

Please tell the children that I loved them always and that my love has never faltered. I grieve that I could not have had the joy of being close to our babies, but that is no one's fault. Thank God they are well -- with my passing all menace to their wellbeing will have disappeared.

I want you to know that I have a deep affection for you. I am deeply grateful for all your kindness. I wish I could have made a happier life for you. It was mostly my fault, please forgive me.

Please write to Fran and Tony and to Marilyn and Jim and tell them that my love and gratitude could not possibly be put into words. Their generosity, devotion, love and tact made it possible for me to accept their financial help over a long period of time. I wish with all my heart that they might have been better rewarded -- All of you, my dear ones, I ask to keep my memory alive in your hearts -- To live on in the hearts of our dear ones is all that I can conceive of immortality. Please think of me kindly. Remember that which was good and lovely in our relationship and forgive me for the many mistakes I have made. Now that it is all said I feel at peace.

I want Dr. B. to officiate at my funeral. I think Joe would like to have him with him at that time.

Dear David, I am sad that I must go just a few days before your birthday -- but it so happened to pan out. I see no good in incurring the expense and misery of the bronchoscopy. I wish I could spare you the ordeal you have ahead. Try not to grieve. I ask all of you, my dear ones, not to mourn my passing. Be glad I am at least free from the misery of the bronchoscopy. I wish I could spare you the ordeal you have ahead. Try not to grieve. I ask all of you, my dear ones, not to mourn my passing. Be glad I am at least free from the miseries and loneliness I have endured for so long and that at last I'll have peace and rest...

ART KLEINER

Two of the five telephone cubicles at the Marin Suicide Prevention Center. The volunteers shown responding to calls are, coincidentally, married to each other — Chris and Joyce Lieberman.

ages in chairs too small for them, and two instructors, the Center's Acting Director Noreen Dunnigan and the Program Director David Nolan. After a warning that statistics are misleading, Dunnigan jumped in.

"For every 100,000 people in the United States," she said, "an average of 12.5 attempt suicide each year. At this center we get 1200 calls a month, from 250 clients. Most people call more than once. Wednesday is our busiest day. ("It's the day most therapists take off," Nolan interrupted.) 80% of the people call about themselves; the rest are clergy, friends, family – calling because they're worried about someone. The later the hour, the higher the number of calls. 34% of the callers are male, 66% female. Can anybody guess why?"

"Men aren't as used to reaching out for help," said a man, the only black person in the room.

Dunnigan nodded and went on: "54% of the callers are not in a suicidal crisis. 46% have problems with alcohol or drugs. 35% live alone. Once every 50 hours, in what we call active intervention, we send someone in – an ambulance or friends, or clergy, or someone else goes over to their house because we ask them to."

"What do you mean by suicidal crisis?" asked a studious-looking woman. "You don't mean 46% are actually trying suicide?"

David Nolan replied. "No, the 54% are people who don't mention suicide at all. They have some other problem – loneliness, maybe – and they want somebody to talk to. 26% have suicidal ideation. They're thinking about it. 13% are threatening suicide. 6% are attempting it as we talk to them. The rest, we don't know about; the calls are too short or we don't find out."

Noreen Dunnigan gave some statistics from the Marin coroner's office about people who did kill themselves. "The highest rate of suicide is in May. We'll talk more about what happens to people in spring. The second highest is in January, just after the holidays. The older the person the higher the suicide rate. The average age for males is 41. The average for females is 45."

"That doesn't mean anyone was actually at those specific ages," Nolan said.

"There were 47 known suicides in Marin in 1980. (There are others we don't know about.) 34 were male. 13 were female. 14 people shot themselves. All but one of them were male. Six people died from car exhaust. Four jumped off the Golden Gate Bridge. The rest were drug overdoses."

Dunnigan described the established theories about why people commit suicide. Freud, for instance, thought most people have two basic instinctual drives – the wish to live (Eros) and the wish to die (Thanatos). Karl Menninger said a suicidal person acts out a wish to be killed ("I don't deserve to live"), a wish to kill someone else, or a wish to die. Old people usually fall into the latter category ("I can't go on."). Young people usually wish to die or be killed.

"There is also a need for attention," she said. "A lot of these people have worn out their family and

friends. The coroner's office tells us that they can usually tell most people didn't really want to die. According to their suicide notes, they wanted to be rescued. Anyone here can be suicidal given the right circumstances or the proper amount of stress.

"When someone calls, we assume they are ambivalent, no matter how suicidal they say they are. Otherwise, they wouldn't call. For myself I want the right to choose to live or die – for example, if I were terminally ill I don't know how I'd choose – but anyone who calls here will have a hell of a battle.

"They let us know that there's a glimmer of hope and that's the side we work with. We feel them out – we ask if they are thinking of killing themselves. We try to find alternatives – not giving them our alternatives, but asking them what they did the last time they felt this way, getting them to remember when they didn't feel this way."

About half the people in the room were taking notes. A woman in her twenties asked, "What do you say after you ask 'Are you thinking of killing yourself?' and they say 'Yes'?"

"Well, often the simplest response is that you don't want them to die. It's not easy. Dealing with suicidal people is usually unrewarding. They're the toughest for therapists, and in fact dealing with them makes some therapists become suicidal." A bearded man in his thirties nodded his head.

A teenage girl with glasses and short-cropped brown hair said, "You say to the person, 'I don't want you to die' and the person says 'Why?' What's your answer?"

"You say, 'I don't want you to die because I care about you."

"They go for that?"

"Yes, they do, if you're sincere." She paused. Nobody said anything. The girl looked dubious. "Have you ever cared about anyone who wanted to die and not been able to come up with a reason why they should go on living? Usually by the time I'm on the phone awhile I have a rapport going, and by that time I usually do have a reason that I care about them. A very intimate relationship builds up very quickly on the phone. Some of you may not be able to dredge up any feeling for some of your callers and in that case you shouldn't lie to them. They can spot a phony right away."

The girl still looked unconvinced, but nodded. Someone else asked, "What do you do with your emotions?"

"You talk to fellow counselors, you talk to staff," Noreen Dunnigan said. "You don't let any individ-

Single female, age 21

My dearest Andrew,

It seems as if I have been spending all my life apologizing to you for things that happened whether they were my fault or not.

I am enclosing your pin because I want you to think of what you took from me every time you see it.

I don't want you to think I would kill myself over you because you're not worth any emotion at all. It is what you cost me that hurts and nothing can replace it.

Single male, age 51

Sunday 4:45 PM Here goes

To who it may concern

Though I am about to kick the bucket I am as happy as ever. I am tired of this life so am going over to see the other side.

Good luck to all.

Benjamin P.

ual callers get into a personal relationship with you. In fact, any counselor who meets a caller outside of the Center is automatically suspended – not suspended – what's the other word for final?"

"Expelled," someone called out.

"Expelled. We don't use the word terminated here."

Laughter. More talk about what to say to people on the phone. "We want to explore their death fantasies and deglamorize them. How do you know there's a life hereafter? Have you known anyone who came back? You won't be able to see your own funeral, and show everyone you were serious. If you overdose you'll probably choke on your own vomit. Your bowels will go. Who's going to find you?

"Get used to saying, 'I want you to flush the pills away now,' instead of saying, 'Would you mind putting the pills away for us?' We want to assert ourselves. We ask, what will your children think when they find you? What kind of example would this be for your children as a way to solve problems? We use all the things we can think of and sometimes they sound manipulative. They are manipulative. We want to get the person through the crisis. We want them to take the gun away and put it on a shelf where they can't see it. Or put it out of the house, better yet.

"We find out what has given meaning to their lives. Has it always been this way? What was it like when it was not this way? Sometimes people say they've always felt this way. You say, 'Let's count back and see if that's true.' "

"But isn't that denying what they just said?" someone asked.

"No, you acknowledge their feeling but you want to do a reality test with them. 'It sounds like you've always felt this way but let's talk more about it.' "

"It sounds like you're trying to instill guilt."

"We don't want them to feel any worse than they already do. But often they haven't thought about everything. It's like tunnel vision. Usually it hasn't dawned on them who it will affect or what the long-range effects of their act will be. Once they realize it they often don't want the suicide to happen. They don't want to die; they want the pain to stop. People who are sure about killing themselves rarely call the suicide hotline."

TELEPHONE CRISIS HOTLINES didn't exist until 1958, when two Los Angeles psychologists stumbled across a bulging file of suicide notes in the coroner's office. Intrigued by the lack of research on rescuing or preventing suicides, they made themselves available for emergency consultation to suicidal patients. Soon it seemed like daytime hours weren't enough, so they set up a phone where patients could call day and night, and manned it with seven staff members. This was the first telephone crisis hotline of any kind, ever. After a few months the paid staff couldn't handle the number of calls, so the doctors trained volunteers.

By trial and error they worked out the principles that most suicide prevention work is based on now. Find out first how lethal a person's intentions are and defuse their plans as quickly as possible. Don't talk about how much there is to live for; ask the callers what their options are. Encourage callers to talk to a different counselor every time they call, so one doesn't get overloaded. Assume that because they called they are asking for help and you have a mandate to save their lives however you can, including tracing the call and sending the police.

Personally, I feel suicide prevention volunteers, like volunteer firemen, are among the truest altruistic community heroes we have. Telephone hotlines are probably the readiest and least manipulative escape valves available for the lonely or depressed. A lot of their value comes from the quality of the people who put in time on them. Most work six to eight hours a week, and the people I've talked to or heard about say they volunteer mainly because they like the other people who work there.

Some volunteers got their start with the drug abuse bad-trip hotlines of the sixties, and drug and suicide hotlines co-evolved, taking methods, enthusiasm, and staff people from each other. Other hotlines like poison control or sex information developed later from these.

The upper-echelon professional suicidology scene is more like an academic industry. Edward Shneidman and Norman Farberow, those two Los Angeles psychiatrists who started it all, have 13 books in print on the subject between them. Most are collections of essays by respectable social scientists. Farberow's latest, **The Many Faces of Suicide** (1980; $21.95 postpaid from McGraw-Hill Book Company, Princeton Road, Hightstown, NJ 08520), says that sky-diving, intervening in violent crimes, drunk driving, prostitution, gambling, and taking risks in general are all suicidal, and implies they can be treated psychiatrically.

In suicide prevention much of the training is learning to listen and react to people. You have to ask direct questions, like "What happened next?" instead of trying to smooth over bad feelings. You have to learn to keep someone who sounds apathetic about everything on the phone until you dredge up something they can get excited about. You have to find out what's going on at the other end – are the callers drinking? Have they abused a child? Are they calling so they can masturbate while they talk to you? – and you have to find out without making judgment about any of those things.

The end of every call is supposed to involve a contract. The caller agrees they will call again before they try suicide, or they will set a small goal for themselves, like writing a letter, and do it. Or they'll go for therapy. The exception is the six percent of people who commit suicide before or during the telephone call. They get the police and ambulance sent to their door.

"Someone calls up and says, 'I just took all these pills, and now I don't want to die' – that's easy," David Nolan said. "They're willing to give you their address. One counselor stays on the phone with them, the other calls for the emergency vehicles. It's a code 3 – lights and sirens – but we like them to turn them off when they get near the house.

"Other times a caller says, 'I just took 50 valiums and I'm drinking a quart of vodka and I want to talk to you while I die.' We don't do that. If we think a life is in danger, we take over. Getting them to tell us where they are depends on the skill of the counselor. 'I need to know where you are and I need to know right now. You are dying.' It's extremely eerie when a person is told he is dying.

"If we have to we will hold them on the line and trace the call. In Marin, tracing takes 30 minutes to two hours, so we usually don't do it. Other

places, we hear, are faster. Once it's traced, we tell the people that we are sending over an ambulance. (Not every suicide prevention center tells them, but it's our policy.) 'You called suicide prevention,' we say, 'and you're dying, and I'm sending you some help.' We ask them to turn on the lights and unlock the door. We don't break contact over the phone until the emergency people get there."

MARC RUBIN, A PARAMEDIC with the San Francisco Department of Public Health, heard I was doing this article and suggested I interview him. Until then it never occurred to me to interview any of the emergency people who are sent to the scene of a suicide. I didn't realize that they are probably more involved with the suicidal person than anyone else. They're the first people who comfort them, the only people who see where they live and what they did to themselves, and they seem to get a more vivid idea of the person's personality than anyone else, until they drop them off at the hospital and never see them again. Rubin talked like he had been storing up feelings for some time. He made me wonder if working in emergencies by nature makes people impassioned and articulate.

"Half my ambulance calls just involve going to a person's house, calming them down, recommending they go to a doctor in the morning. It's a 'give me strokes' kind of call. People just want to talk to somebody. If they call emergency and say they're contemplating suicide they are sent the ambulance and the police. If there's violence the police go first – they're paid to risk their lives. Then we take the people to the hospital.

"If you talk to the police and paramedics you find they feel many of these people should be allowed to die. We're bound by our jobs to make them live, but there's a lot of distaste for it. You never know if the suicidal person was distraught or made a rational decision. It's real hard to put a value judgment on it.

"We see a lot of alcoholics, gays, recently divorced or separated people, lonely people. People that I would characterize as emotionally vulnerable. We see them at the height of their vulnerability. We see some people who cut their wrists gingerly, knowing that it won't kill them, just to try it and see what it feels like. We see others who are serious about it, actively seeking it out but not sure if they're going to do it until the moment comes. Those are the ones we have to talk to as they're about to jump off a building.

"My last call of the shift last night was a man who shot himself. I got there and saw this girl cool in the doorway: 'I think my father's shot himself. Check downstairs.' His wife said, 'I didn't want him around any more and he shot himself.' He was Chilean. In some cultures in a situation like

Married male, age 48

Elaine Darling,

My mind -- always warped and twisted -- has reached the point where I can wait no longer -- I don't dare wait longer -- until there is the final twist and it snaps and I spend the rest of my life in some state run snake pit.

I am going out -- and I hope it is out -- Nirvanha, I think the Bhudaists (how do you spell Bhudaists?) call it which is the word for "nothing." That's as I have told you for years, is what I want. Imagine God playing a dirty trick on me like another life!!!

I've lived 47 years -- there aren't 47 days I would live over again if I could avoid it.

Let us, for a moment be sensible. I do not remember if the partnership agreement provides for a case like this -- but if it doesn't and I think it doesn't, I would much prefer -- I haven't time to make this a legal requirement -- but, I would much prefer that you, as executrix under my will, do not elect to participate in profits for 2 or 3 years or whatever it may be that is specified there. My partners have been generous with me while I worked with them. There is no reason why, under the circumstances of my withdrawal from the firm, they should pay anything more.

I could wish that I had, for my goodby kiss, a .38 police special with which I have made some good scores -- not records but at least made my mark. Instead, I have this black bitch -- bitch, if the word is not familiar to you -- but at least an honest one who will mean what she says.

The neighbors may think it's a motor backfire, but to me she will whisper -- "Rest - Sleep."

Albert

P.S. I think there is enough insurance to see Valerie through school, but if there isn't -- I am sure you would out of the insurance payments, at least --

I hope further and I don't insist that you have the ordinary decensy -- decency that is -- to do so -- Will you see Valerie through college -- she is the only one about whom I am concerned as this .38 whispers in my ear.

Married male, age 45

My darling,

May her guts rot in hell -- I loved her so much.

Henry

Divorced female, age 61

You cops will want to know why I did it, well, just let us say that I lived 61 years too many.

People have always put obstacles in my way. One of the great ones is leaving this world when you want to and have nothing to live for.

I am not insane. My mind was never more clear. It has been a long day. The motor got so hot it would not run so I just had to sit here and wait. The breaks were against me to the very last.

The sun is leaving the hill now so hope nothing else happens.

that they don't think the man's a jerk if he takes his life. It's the courageous thing to do.

"I like working on the street. People in emergency rooms get patients for a length of time, but I do my medical things and get them there and then I'm done. My role is medical intervention. I make sure they don't compromise their vital functions. That means checking their airway – listening for the movement of air through the mouth and nose – and their breathing rhythm – are their lungs expanding? And checking their heartbeat – is it fast enough? Is it stopped? If it's off you have to do cardio-pulmonary resuscitation, which involves pressing on the sternum and spine to get the heart going again. A lot of times if someone's lost fluid or if they're in shock we have to replace the fluid or blood intravenously.

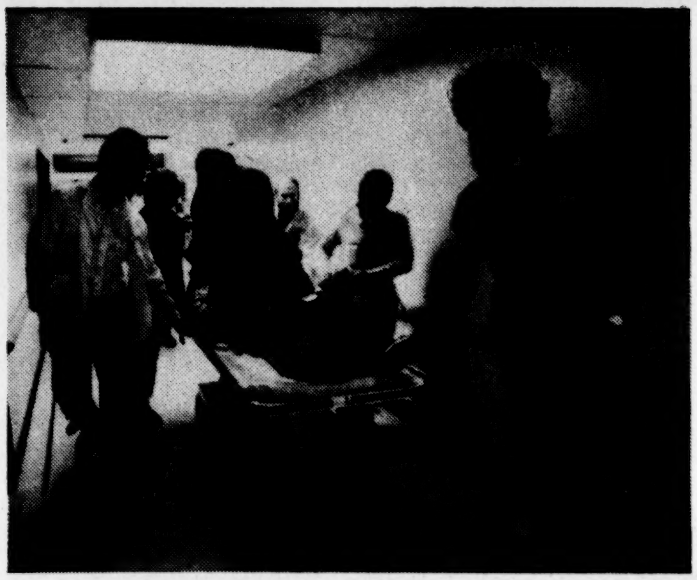
"If they're suicidal we are always required to take them to the emergency room. If they're conscious, say if I've just bandaged their arm, then as a courtesy I'll ask if they'll come to the hospital with us. If they're upset or say no, they'll still have to come, though.

"There are so many scenarios. Most of the time the police, medical people, and firemen are compassionate, but it's still scary. There are six or eight people in uniforms looking at this scared, vulnerable person. If everything goes well, they might even like giving up responsibility for themselves to the people in uniform. But otherwise, all it might take for them to go off the handle is for somebody to make a wisecrack – say if the patient's in drag. Or sometimes people get angry just because you're in a uniform. Then you have to talk them down.

"I stay professional a lot of the time – not cold, but impersonal. Then I move up or down from there to more or less professional in tone. Sometimes I'll talk to the person about why they did it, what their alternatives are. If they're hysterical I try to get them to talk about something they like to do. I'll talk about my own problems, real or contrived.

"Society doesn't support its losers. A theme I get repeatedly from suicides is 'Look at me, I've failed and I don't want to go seek help.' There's a lot of embarrassment. I tell them everybody needs help. A lot of people go to psychiatrists – doctors, police, politicians. I try to get them laughing. I don't myself but I try to get them to.

"I kind of enjoy it. As you know there are realms of thought under a psychedelic that you can't enter any other way. Psychosis is like that and that's why I appreciate it. I've sung things like quasi-Indian chants with people. I find that some policemen do the same. There's often a lesson that a psychotic person is offering me. Not to get



ROBERT FOOTHORAP

Though this patient at San Francisco General Hospital was not suicidal the scene is similar to what happens when a suicide attempter comes into the emergency room in a coma. The man on top of the patient's chest is a paramedic who has been doing cardiopulmonary rescuscitation (pumping his chest to get the heart going) all the way from inside the ambulance. The woman on top of the cart is trying to open the patient's airway. The room he has been wheeled to is one of the quick intensive care wards in the emergency room. (The attempts to revive this heart attack victim were unsuccessful.)

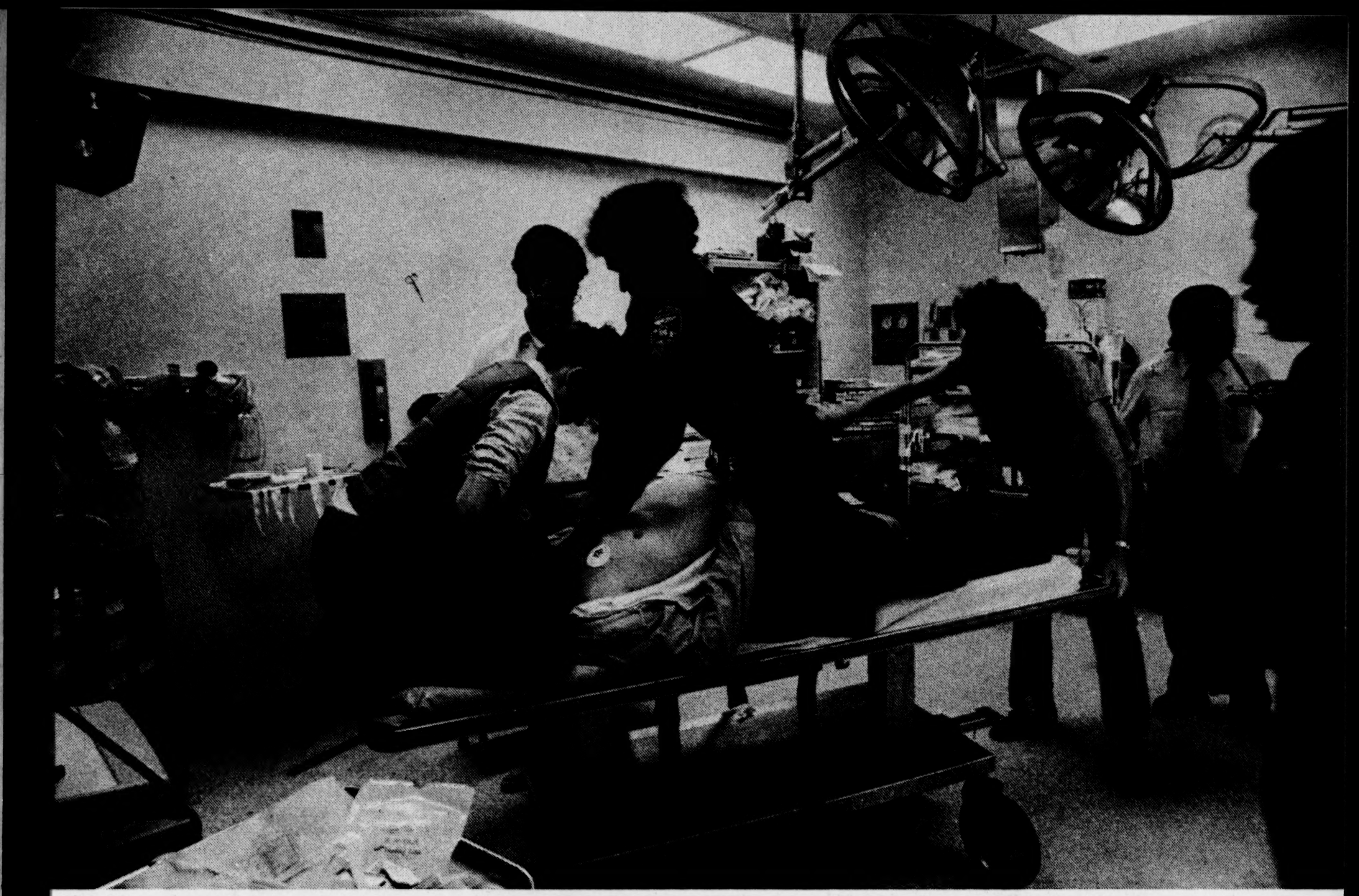
ROBERT FOOTHORAP

too dependent on something – habits, jobs, people, money, family – that has let someone down. Or not to take myself too seriously. I think you have to be somewhat egocentric to attempt suicide. I ask the egocentric ones sometimes if the world is really going to care that much.

"There's a lot of voyeurism in it. I find that with a lot of medical people. They'll hear a hot call – a knifing, maybe – and really want to see it. Anytime you have a collection of fire and ambulance equipment, people gather on the street.

"A lot of people don't want to take the responsibility. A friend of mine had a call downtown – a man on a roof twenty stories high. She stayed up there talking with this man. Can you imagine how you'd feel if he said, 'No, no, you're wrong' and jumped off?

"That guy who shot himself in the head last night – I wouldn't feel comfortable trying to resuscitate him. He was warm but the chances of living were too low. If he had had any other signs of life – blood pressure, pulse, respirations – I would have had to do something. It's hard to do heroics to bring someone back to life for a day or two. I had a man a couple of months ago who had been shot in the head and I did resuscitate him. I felt



bad that he had the trauma of being slapped in an ambulance. Things like that you have to try to do – you have to try.

"The whole idea of trauma centers is to take people who would die otherwise and bring them back to life. Whether their life is meaningful or not doesn't matter. We go for everybody. You're usually naked when you go in. I can't put it down, but in a way it's barbaric. I wouldn't want to go through it. If I'm that close I'd just as soon let it go."

UNTIL RECENTLY, EMERGENCY room doctors were people who'd rather be elsewhere. Even now, a lot of emergency room doctors are moonlighting residents or specialists forced by their hospitals' rotating assignments to do occasional "trauma duty." But emergency medicine is becoming a specialty of its own, perhaps because four times as many people per capita visit emergency rooms as did twenty years ago. If someone you know is in danger of dying, call emergency services, not your family doctor, because that's what the emergency room does – keeps people from dying.

The basic principle for keeping suicides from dying is to do as little as possible. Most drug overdosers

Married male, age 74

What is a few short years to live in hell.
That is all I get around here.

No more I will pay the bills.

No more I will drive the car.

No more I will wash, iron, & mend any clothes.

No more I will have to eat the leftover articles that was cooked the day before.

This is no way to live.

Either is it any way to die.

Her grub I can not eat.

At night I can not sleep.

I married the wrong nag-nag-nag and I lost my life.

W.S.

to the undertaker

We have got plenty money to give me a decent burial. Don't let my wife kid you by saying she has not got any money.

Give this note to the cops.

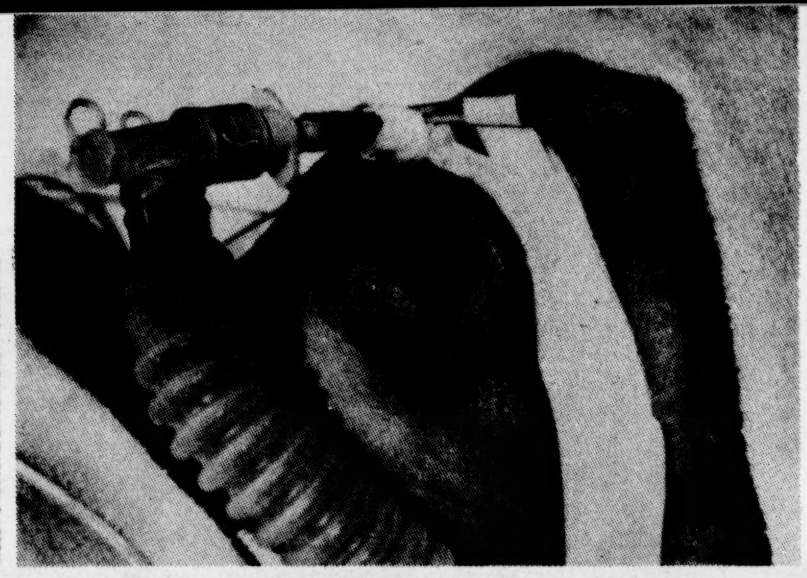
Give me liberty or give me death.

W.S.

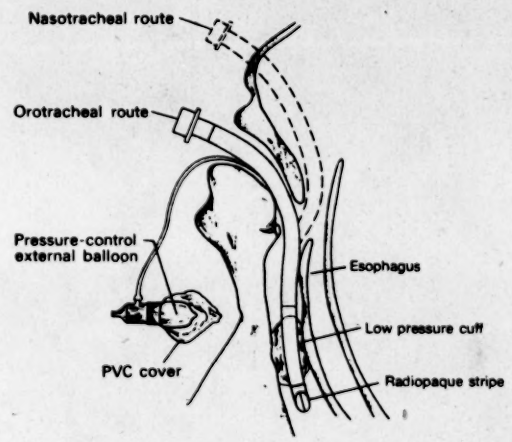
are left unconscious in a place where they can heal. The more the hospital has to do, the more chance of infection or accident. Drugs, including psychiatric drugs, are avoided, because they might react with drugs the patient already took. Before the 1940s, when Swedish doctors discovered this, about 45% of the barbiturate overdose patients in emergency rooms died from attempts to wake them up with drugs. Now more than 95% of people who come into the emergency room on a drug overdose live. Many suffer no more than a day or week of discomfort in a hospital bed, like a teenager I heard about who tried to kill himself with 100 vitamin tablets. Others compound their problems with severe medical damage that may be permanent or take years to go away.

My information on the medical aftermath of suicide comes from half a dozen interviews with emergency room staff people, but two were especially helpful – Larry Bedard, M.D., a former psychiatric resident who now manages the emergency room at Marin General Hospital, San Rafael, and Howard McKinney, Pharm. D., a pharmacologist with the San Francisco Poison Control Center, who answers telephone inquiries and consults with emergency room staff. Like other emergency room staff people I talked to about this article, both these men are among the most thoughtful, direct people I have met.

This is not an exhaustive survey; anything less than a medical textbook is bound to be sketchy, misleading in places, and oversimplified.*



MOSBY'S MANUAL OF CLINICAL PROCEDURES



PULMONARY EMERGENCIES

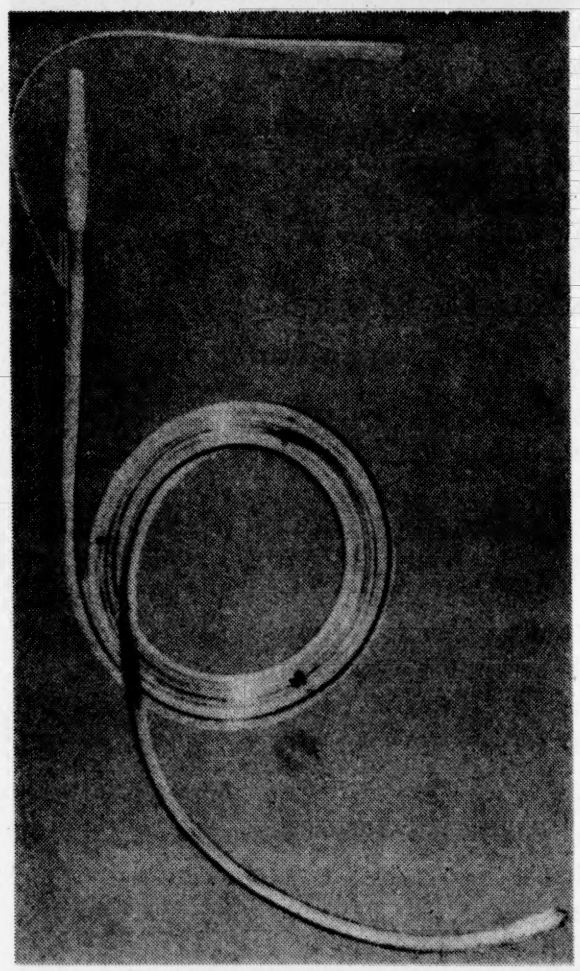
Drug overdoses can cause inability to breathe, which in turn can cause brain damage. The immediate remedy, intubation, involves running an endotracheal tube through a patient's nose or mouth to their lungs — thus clearing an airway. The photo shows a "properly secured ET tube"; the diagram shows the path the tube takes down to the lungs.

Most suicides are drug overdoses, and many drug overdose patients reach the hospital in a coma. The danger in all drug overdoses is that the brain may not get enough oxygen. The airway to the lungs may get blocked off by the patient's vomit, or by the tongue falling back into the throat, or by drug-induced slowdown in the part of the deep brain that controls the rate and depth of breathing. Or the heart may seize and fibrillate – all the heart muscle fibers quiver, but none in rhythm with each other. The blood doesn't move, so it doesn't take oxygen to the brain or carry away waste.

It only takes three to five minutes without oxygen to do permanent damage to the brain, starting at its most sophisticated sections. The memory is destroyed; the ability to read or speak is cut back. The longer it goes on, the more severe the retardation. So any poisoned patient is constantly monitored to make sure they can breathe and their heart is beating. If they can't breathe, they are intubated. A physician slides a tube down their mouth or nose, through their throat, into their lungs for air to pass through.

Drug overdose patients are usually given sugar (in case they have low blood sugar), thiamine (which might have been depleted from the blood by alcohol) and Narcan, an antidote for opiates. They're given because the deficiencies or drug effects they correct are hard to spot right away and can be quickly lethal. Compared to the very few other antidotes that exist, these are considered low-risk. Patients are often given Ipecac, which makes them vomit. Then they are given activated charcoal, which looks like gruel and soaks up some of the poison in the intestines before coming out in diarrhea induced by a cathartic, magnesium citrate. The cathartic also increases the rapidity with which the poison goes through the intestines, thus cutting down the amount absorbed by the body.

*Some books in **The Next Whole Earth Catalog** which I found useful for information are **Licit and Illicit Drugs** (p. 579), **The Essential Guide to Prescription Drugs** (p. 326), and the emergency medicine textbooks reviewed on p. 311. A good book to browse in for the technical story of drug effects on people (along with anything else in pharmacology) is the classic medical text **Pharmacological Basis of Therapeutics** (Louis S. Goodman and Alfred Gilman, Editors; 1941, 1980; $45 postpaid from McGraw-Hill Book Company, Princeton Road, Hightstown, NJ 08520). A good emergency room guide with illustrations is **Atlas of Diagnostic and Therapeutic Procedures for Emergency Personnel** by James H. Cosgriff, Jr. (1978; $26 postpaid from J.P. Lippincott Company, Keystone Industrial Park, Scranton, PA 18512).



ATLAS OF DIAGNOSTIC AND THERAPEUTIC PROCEDURES FOR EMERGENCY PERSONNEL

The Salem sump tube, one of the several types that are passed down a patient's esophagus in gastric lavage, or "stomach pumping." The process is usually used only with patients in comas or conscious suicidal patients who are being "punished."

Married male, age 45

Dear Claudia,

You win, I can't take it any longer, I know you have been waiting for this to happen. I hope it makes you very happy, this is not an easy thing to do, but I've got to the point where there is nothing to live for, a little bit of kindness from you would of made everything so different, but all that ever interested you was the dollar.

It is pretty hard for me to do anything when you are so greedy even with this house you couldn't even be fair with that, well it's all yours now and you won't have to see the Lawyer anymore.

I wish you would give my personal things to Danny, you couldn't get much from selling them anyway, you still have my insurance, it isn't much but it will be enough to take care of my debts and still have a few bucks left.

You always told me that I was the one that made Sharon take her life, in fact you said I killed her, but you know down deep in your heart it was you that made her do what she did, and now you have two deaths to your credit, it should make you feel very proud.

Good By Kid

P.S. Disregard all the mean things I've said in this letter, I have said a lot of things to you I didn't really mean and I hope you get well and wish you the best of everything.

Cathy -- don't come in.

Call your mother, she will know what to do.

Love Daddy

Cathy don't go in the bedroom.

If the patient is in a coma a tube may be run through the nose or mouth and passed bit by bit down the esophagus into the stomach. A saline solution flows through it into the stomach, and then is sucked back through the tube with some of the poison. Emergency room staff call this "lavage"; on the street it's known as getting your stomach pumped.

"If you come in awake and alert you should not have your stomach washed out," Bedard said. "But some doctors and nurses don't like to take care of overdoses. They feel like suicidal people should be punished, so they stick a tube down. It's not pleasant – the tube is about the size of your thumb. Most people feel like they're choking to death."

The two most common types of drugs in suicides, McKinney said, are those found around the house and those used in psychotherapy. Seemingly innocent aspirin is "one of the messiest, most complicated overdoses you ever hope to see," he said. People who swallow lots of aspirin react first by getting sick to their stomachs. Beyond that, it affects nearly every system in the body unpredictably, and two different people who took 100 aspirins could get sick in completely different ways.

Aspirin is an acid. It burns the gastrointestinal tract from the inside. It changes the blood's pH level, which is normally at 7.4 (close to neutral). It sometimes makes the blood acidic, but it also accelerates the brain's breathing control center, which puffs out carbon dioxide twice as fast as it normally would, and thus makes the blood alkaline. Either way, it throws off the metabolic balance among kidney, lung, and blood. "It produces fever," McKinney said. "The fever, in turn, if it goes on long enough to overheat the brain, can cause seizures. You can burn out parts of your nervous system." Aspirin also carries a high risk of gastric hemorrhage. Occasionally people on aspirin overdoses become deaf or develop a ringing in their ears that doesn't go away.

The pain-reliever acetaminophen, sold as Tylenol, also makes people sick to their stomachs at first, but then gets more deadly. The drug changes into toxic particles that are usually neutralized by glutathione, one type of coenzyme found in the liver. In overdose, if it isn't pumped out in time, the toxic particles deplete all the glutathione, causing the painful death of an hepatic coma. Even relatively late in the process surrogate glutathione can save the liver, but if the organ

does become diseased the results can be similar to those of hepatitis: jaundice, itchy skin, depression, long-term listlessness, inability to eat much.

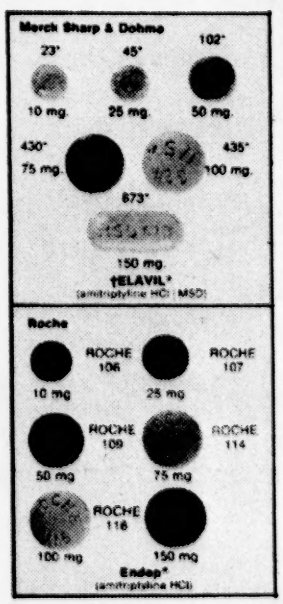
"The liver detoxifies poisons that build up in the body," McKinney said. "If you destroy the liver it's like never taking the garbage out. Specifically the most common build up is ammonia in the blood, which you know if it goes too far will put you in a very deep coma, and then kill you."

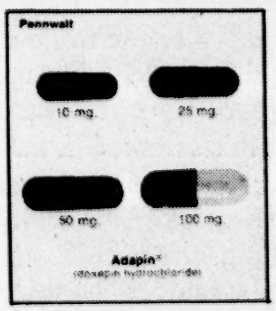
Both McKinney and Bedard told me about people who took Tylenol or phosphorus, which also destroys the liver (and incidentally produces phosphorescent vomit). In both cases, they slept off the initial sickness, and recovered for five days – during which time they decided suicide was a mistake after all, and they wanted to live. But the liver had been destroyed, and after five days each of them started to feel very sick, passed into deep coma, and died. "He knew it would happen, and that there was nothing we could do about it," Bedard said, "and his friends and family knew it, and for five days they sat in the hospital together waiting for it."

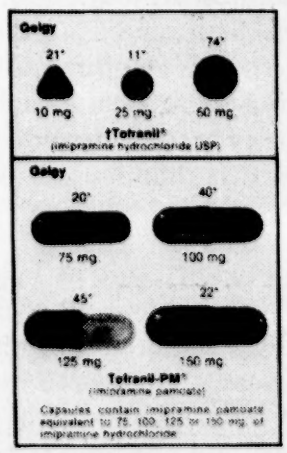
Probably the most painful form of suicide attempt, whether or not it ends in death, is swallowing lye, Drano, oven cleaner, and other household caustics. Most of us know how painful these are because scare stories have been passed down in household lore from 100 years ago, when caustics were the preferred suicide method. Unlike suicides today, who visualize themselves slipping off into oblivion, people who killed themselves in the 19th century expected to suffer along the way.

"Very few people that ingest caustics die," McKinney said. "If they do die, it's days, weeks, or even months later, of infection. I'm pretty immune to most gore, but I draw the line at the burn unit." Caustics scar the mouth and tongue, puncture holes in the esophagus, burn the chest from the inside and block the gastrointestinal tract with scar tissue. Even the process of treating inner burns is painful; surgeons drop an endoscope, or fiber-optic camera, down the person's throat, unavoidably scraping it against the raw nerves there, to see what the damage is. Repairing an inner burn can take 15 or 20 years worth of surgical operations, plus fluid therapy and antibiotics to keep infections from growing. Swallowing can be painful for the rest of a person's life, and some survivors of such attempts have to be fed intravenously for years afterwards.

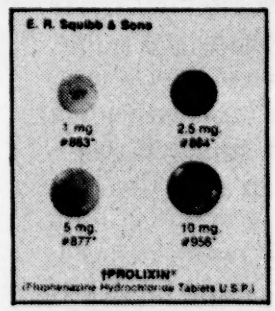
Psychiatric drugs – phenothiazines like Thorazine or Haldol, tricyclic antidepressants like Elavil – cause what are probably the most morally offensive overdose cases. "It's a built-in irony," McKinney said. "The very population of patients currently under therapy to supposedly avoid suicide are often handed enormous quantities of medication. You might as well give the guy a gun. Except for child abuse, nothing outrages the emergency room staff as much as when someone comes in with an overdose on Thorazine and you go through their pockets and see the same doctor has prescribed

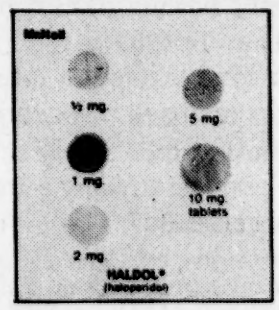


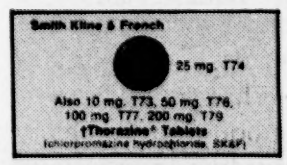


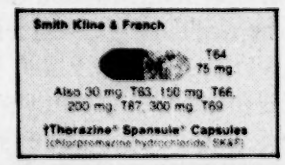


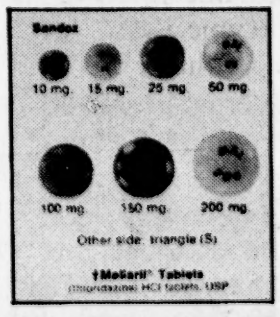
Some common tricyclic antidepressants or "mood elevators," a type of psychiatric drug often found in suicidal overdoses. Symptoms of overdose: "Dry mouth, blurred vision, bladder paralysis, coma vigil (light, arousable coma; may be interrupted by myoclonic convulsions and epileptic states), severe sweating, hyperpyrexia (high fever), cardiovascular conduction and rhythm disturbances. . ." All drug pictures and quotes are from Psychotropic Drugs (Manual for Emergency Management of Overdosage) by Nathan Kline, M.D. and Jean-Pierre Lindenmayer, M.D. (1974, 1981; $15.95 postpaid from Medical Economics Company, Book Division, Oradell, NJ 07649).











Some phenothiazines or major tranquilizers, a type of drug used to calm down upset, disturbed or unruly psychiatric patients. In overdose: "Drowsiness, disorientation, dry mouth, blurred or double vision, hyperactive tendon reflexes, parkinsonism (tremors, various degrees of rigidity, motor retardation, excessive salivation), dystonia and dyskinesia (tics, perioral spasms, drooling), akathisia (motor restlessness, inability to keep still, compulsion to be on the move), convulsions, bladder or bowel paralysis."

three or four hundred tablets in a two-week period. Those are the doctors who get a phone call at three a.m. saying, 'You better get down here now and see your patient.' " (Hardly ever does the psychiatrist show up, McKinney and other doctors told me; it's more common for the answering service to find out who's calling and why and then say the psychiatrist is out of town.)

"Tricyclic antidepressant patients are in a particular high-risk situation," McKinney said. "Typically a person is depressed over a long time; he goes to a psychiatrist and after some psych workshop procedures it's decided he needs an antidepressant. Classically, Elavil is prescribed. Elavil takes three to eight weeks to work, and an average of four weeks. The person may not be told clearly enough or may not want to hear that the drug takes a long time. Two weeks later he bolts upright and says, 'This is the biggest crock of shit,' and swallows the rest of them."

The phenothiazines, or major tranquilizers, are used to calm down psychosis or extreme anxiety. The tricyclic antidepressants are chemical mood elevators. Both work by somehow altering the minute bursts of chemicals which neurons send across the synapses, or gaps between nerves, to carry impulses from one nerve to another.

Because they affect the nervous system which in turn reacts with every other system in the body, psychiatric drugs have lots of side-effects – dilated pupils, dry mouth, feverishness, speeded-up heartrate, slowed down digestive muscles, breakdowns in coordination, rolling eyes. Overdose can accelerate these in any part of the body. I once met a man whose hand muscles had contracted violently after a phenothiazine overdose, leaving his fingers permanently warped. Tardive dyskinesia, a Parkinson's Disease-like condition caused in some patients by long-term use of the drugs, can be accelerated by an overdose. Probably the most common permanent damage from overdose is brain damage, caused by seizures and fibrillation.

The exotic drugs of mystery novels, strychnine and cyanide, are painful and deadly but rarely show up in emergency rooms. What shows up all the time are sleeping pills and mood pills – the sedative hypnotics – barbiturates like Seconal, mild tranquilizers like Valium. Typically, a sedtive overdose will do nothing more than put you

Married female, age 50

When a "man" doesn't know where to take his wife -- then she isn't a wife any more --

I hope you will be "free" to take anyone any place and I'm sure you will not have any trouble as to places --

Please don't tell my mother the truth -- your whole tribe is partly responsible for this -- from your mother on down -- hope they are satisfied.

Married female, age 56

About the Evil god (yes)

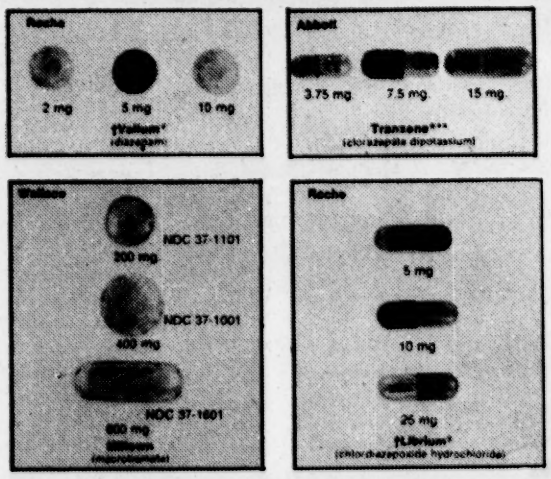
About the Evil Seers killing people for their money (yes)

I am a profit at my death

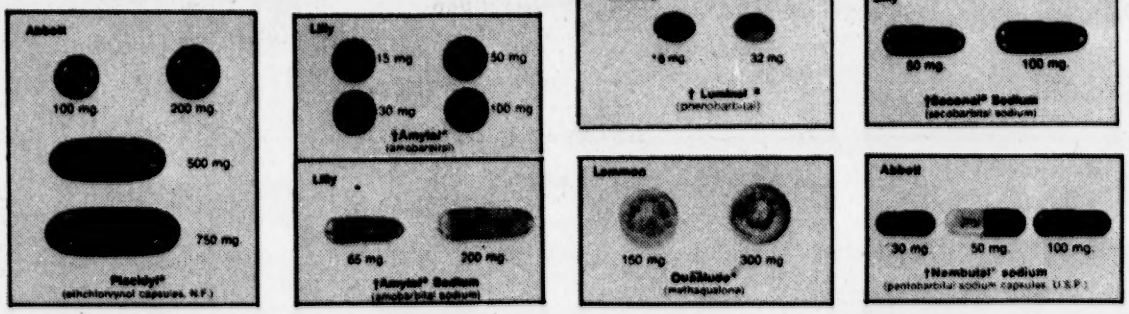
I am a root of the stem of Jesse (yes)

We have made many discoveries. We have found out who the people with the mark of the beast are. And the devil was a human being now killed and cast into hell and the angel with the keys of the bottomless pit is in hell casting out all the good souls which these evil people have cast into hell for no reason. The good Seers who serve our God are 1/3 to 2/3 of the evil ones in this world. We are better than holding our owne but in Heaven God is almost over come and I kill myself so I may go and help him, because I have a funny little quirk in my brain which helps.

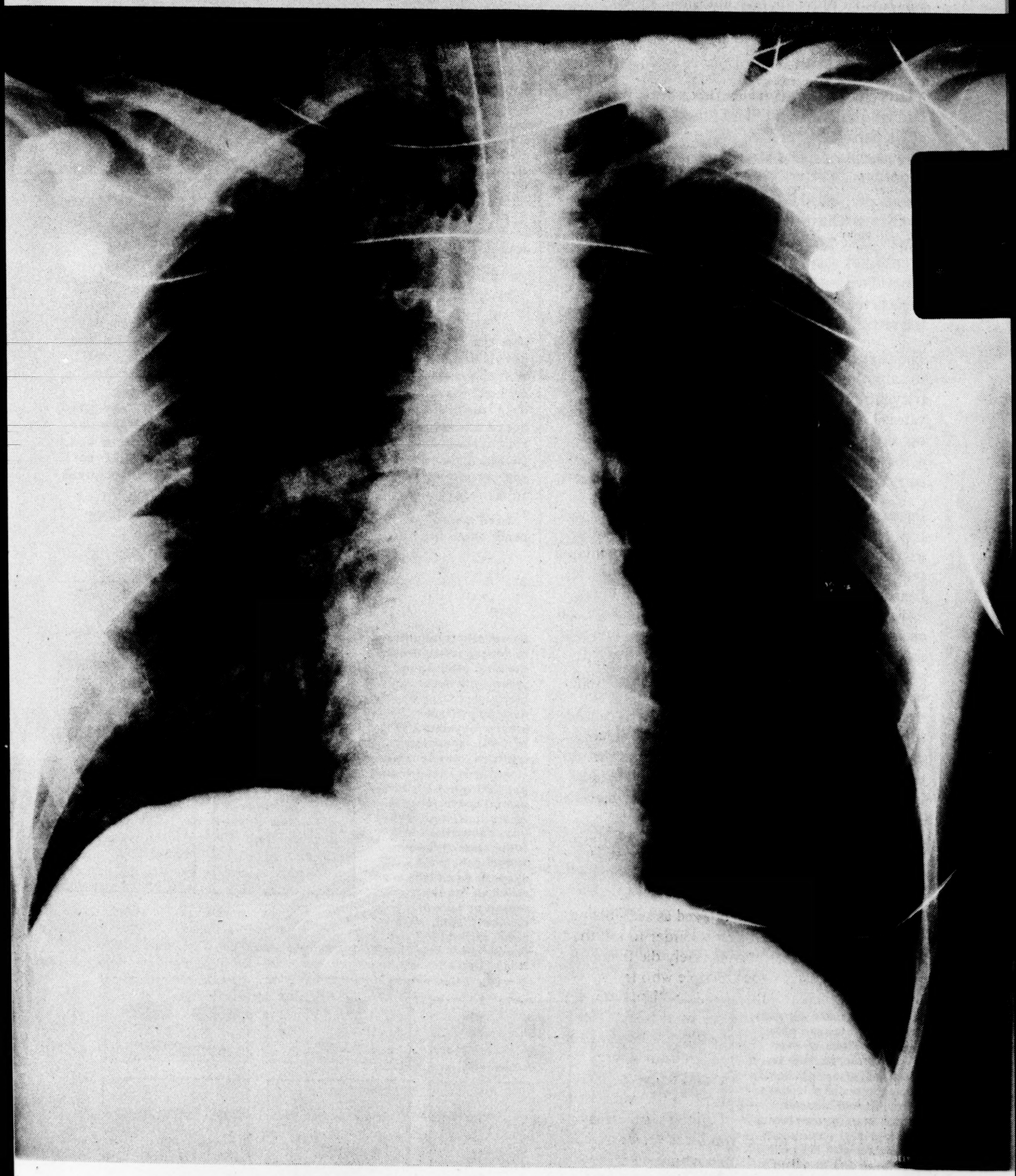
6 palmy each at a few years sport. Our god will send them into the world.



Some mild tranquilizers or "anti-anxiety drugs," the kind often found around the house. In overdose: "Drowsiness, nystagmus (rapid, involuntary movement of eyeball), weakness, lassitude, muscle relaxation, tintinnitus (ringing or buzzing noise in ears), mental confusion, hallucinations, hyperactivity, convulsions in some cases, hypotension/shock, coma with cyanosis (a bluish coloration of the skin caused by lack of oxygen), rapid, weak pulse, respiratory depression."



A few of the many brands of barbiturates and sedative/hypnotics. In overdose: "Slow, shallow respirations, disorientation, unsteadiness of gait, deep coma, flaccid muscles, shock; there always is a possibility of pneumonia associated with lung congestion of any duration."



A chest X-ray of someone who came into a large city hospital unconscious and aspirating after a drug overdose. The X-ray looks into his front, so the lung on our left is actually the patient's right lung. That's where the trouble is. What looks like grey and white bubbles floating inside is vomit that dripped down from his throat. His left lung (on our right) is comparatively clean. In a normal X-ray both sides would look like that. At the top of the throat is the bronchial tube through which they are trying to help him breathe. The sharp white dots (electrocardiogram probes) and the thing that looks like a telephone cord (part of the intubation machine) are both outside his body.

I saw this man. He had been running a 106 degree fever for more than a day when this picture was taken and his rib cage jerked spasmodically every time he tried to take a breath. His eyes stayed half-open. They expected him to die. But he was still alive, in the same state, two weeks later. It's doubtful he will ever be conscious again. If he stays alive like this he'll be transferred to a chronic ward in a mental hospital. —Art Kleiner

The scars of a young woman who cut herself on the wrist. "Intensive individual case work suggests that self-laceration may involve an altered state of consciousness akin to a dissociative state. . . . There may be no experience of pain until after the event when there is subjective relief of tension mixed with feelings of disgust and regret at what has happened." —Picture and quote from the clinical psychiatry text **Death Wishes?** by H.G. Morgan (1979; John Wiley and Sons).

to sleep for a day or two, and leave you with a bad hangover and a case of the slows when you wake up. But like many other overdoses, sedatives are often taken with alcohol, which makes people nauseous. Anyone who vomits when they're passed out risks sucking some of the vomit into their lungs, which is called aspiration.

It's as dangerous as it sounds disgusting. Vomit contains enzymes from the stomach that destroy tissue, and those go to work on the lung walls. It also contains a rich broth of food, perfect for pneumonia bugs to grow in. People can also drown in vomit, which keeps air from getting to the brain, which once again causes brain damage. An aspirating patient goes into intensive care; a device called a bronchoscope is used to look into their lungs and pull out whatever pieces of vomit it can.

Drug overdoses are always unpredictable. The drugs react with other drugs people take at the time, with alcohol, with odd allergies and drugs lingering around in the bloodstream from years before. "One fellow took four cold tablets," McKinney said, "and went to an emergency room complaining of a headache. He blew the blood vessels behind one of his eyes out."

Violent death is so often portrayed as sudden and painless, but the human body is harder to kill than it seems. For instance, people rarely die from slashing their wrists. "Most people who try it aren't really suicidal," Bedard said. "Usually it's a cry for help. A few want to see what it feels like to cut themselves. We just sew them up and call in the psychiatrist." Even if you cut your artery, which most people don't, it's hard to bleed to death because the bleeding stops on its own unless the cut is extremely severe. Popular wisdom says sitting in hot water makes you bleed faster, but Bedard said he's known people who tried it,

Single male, age 13

I know what I am doing. Annette found out. Ask Cara. I love you all.

Bill

Widowed female, age 52 (Her husband died three months before.)

Please tell Ron's folks I love them very much but my heart breaks when I see or hear from them. Also all our friends especially Irene and Charles and Ella I love them also. Forgive me for not seeing them.

Everyone seems so happy and I am so alone. Amy. I wanted to visit you but I am going around in a dream. Alice I wanted to help you paint but how could I with a broken heart. And my head aches so much any more my nerves are ready to break and what would happen if they they did.

You will say I am crazy and I can't go on this way just half living.

I loved this house once but now it is so full of memories I can't stay here. I have tried to think of some way to go on but can't. Am so nervous all the time -- I loved Ron too much but is that a sin, with him gone I have nothing. Oh I have the girls and family but they don't fill the vacant spot left in my heart ...

Xmas is coming I can't go on I'm afraid I would break down. I've thought of this so many times. I love every one but I can't be one of you any more. Please think kindly of me and forgive me. I only hope this is fatal then I can rest and no more trouble to any one. Do with Lisa whats best I know she has been a lot of worry to mama and I'm sorry. I tried to keep the yard up that seemed to be the only comfort I had. I loved it but that wasn't anything. I've lost every thing so why go on. I worshipped Ron and when he went I lost my whole world and everything.

I'm so tired and lonely.

There goes a siren. Oh how can I stand being left. I need to go to a Dr. but I am afraid. I'm so cold.

Mother Love, Louise

A 1980 gunshot suicide attempt that failed. This woman held a rifle to her ear, but pressure on the trigger pulled the rifle forward, so the bullet went through her jaw instead. "This is not uncommon in gunshot suicide attempts," said the anonymous doctor who gave us the photograph.

passed out, and woke up in a bathtub full of cold bloody water.

"But it's an easy way to hurt yourself," he said. "You can damage the tendons and median nerve which control the muscles of your hand. People end up with claw hands. Lots of times, with microsurgery, that can be repaired, but it means six to twelve months out of your life, and you still end up with a weak or deformed hand."

The few people who cut their throats also rarely die. "They often cut the recurrent laryngeal nerve," Bedard said, "the nerve that goes up to the voicebox and larynx, and lose their voices. Or they cut themselves and bleed beneath the surface until they choke on a buildup of blood inside the trachea."

Bedard said most suicide shootings he's seen were hostile, done while someone else was around to react to it. Interestingly, you can shoot yourself in the head and miss the brain but merely blow out an eye or part of your jaw. If you die, the death is usually drawn out and painful.

"People can live eight hours with a hole in their head the size of a half dollar," Bedard said. "If you shoot yourself in the temple, the primitive parts of your brain that control breathing will go on for a long time, from minutes to hours. Eventually they may be shut off by pressure from the swelling of the upper brain that was shot. Or they may not be shut off at all. One man I treated is completely paralyzed on his left side, and can't speak, walk, or feed himself. It's as if he had a major stroke. He hit the area of the brain which controls motor function."

Jumps and hanging, again from Bedard: "I'm amazed at how far you can fall after a jump and not kill yourself. Some people have fallen 150 feet and lived. They'll break many of their bones, or rupture an organ like the spleen. Many people who try to hang themselves don't fall far enough to jerk their neck back and snap their airway. They strangle themselves instead, and don't always die; they get brain damage from lack of oxygen." People who try to poison themselves with gas or carbon dioxide may also get brain damage for the same reason.

And finally, just falling into a coma can lead to permanent damage. "If you're slumped on a table, leaning on your arm for a day and a half," Bedard said, "you put pressure on the armpit. You can permanently damage the nerve there and make it hard to use your arm. Or your muscles might start to dissolve into your bloodstream and clog up your kidneys. The muscle damage probably eventually returns to normal."

These clinical generalizations make suicidal people seem like statistical ciphers who made a mistake and suffered the immediate, appropriate retribution. But it doesn't feel like that at the time. Whether or not you are glad you were rescued, recovering from a suicide attempt is like being in the emergency room for any other reason. The flash that brought you there was over in a moment. The waiting, being embarrassed, wondering what will happen next, and bearing sharp or dull pain go on for hours.

How, according to people who work with them, do suicide attempters feel when they wake up in the hospital? Glad they were saved. Convinced that suicide was a mistake. Angry they were saved. Angry at the friend or neighbor who betrayed them by calling emergency. Eager to to get out of the hospital so they can try it again. Embarrassed. Relieved. Happy to be taken care of. Eager to start taking care of themselves again. Unwilling to think about it. Wondering what everyone else they know thinks about it. Wondering if the person they were trying to reach will finally pay attention to them.

"A lot of what I hear in the emergency room is hostility towards a specific person," Dr. Bedard said. "Once they know they're not going to die, they go out of their way to talk to me about it. 'I'll show that son of a bitch. He didn't think I had the guts to do it.' A lot of these people fantasize about seeing themselves at the funeral. 'The whole world's going to be upset.' "

There are people who get ignored repeatedly until they attempt suicide. One woman I heard about tried to kill herself six times in one year. "My

husband says he's too busy if I ask him to take me out to dinner," she told the emergency room staff. "But for this he makes time."

If it isn't the attention of a particular person, it might be the emergency room staff. Sadly, many people can only get a lot of paid professional people to notice them by threatening their own life. "A lot of people we see are repeaters," Bedard said. "They might come in 20 times in five years. To them it's a game. 'Either you take Ipecac and vomit or we'll have to do gastric lavage,' we'll say. 'You know and I know it'll hurt, so why don't you take the Ipecac?' Sometimes you see the same people so often it's like visiting an old friend."

Other people take a pill overdose not to risk their lives, but to find a place where they can be taken care of and forget their problems for a little while. "People want time out," said Temple University psychiatry professor Michael Simpson, who ran the emergency psychiatric service at Guy's Hospital in London. "That's why sometimes they'll seek psychiatric support but leave in a day or two. They used to be able to do it more freely in the drug culture by finding a crashpad. Now the medical model is one of the few excuses for going away and lying around and having people be kind to you that is seen as a valid reason to leave work. Maybe we need other ways to legitimize that."

PEOPLE WHO ATTEMPT SUICIDE are almost never arrested, but they lose their right to decide what happens to them. In every state, being a possible danger to yourself, in the opinion of the psychiatrist who interviews you, is cause for being held for psychiatric care for a limited period of time. In California, the period of time is three days; it can be followed, with an application to a judge, by a 14-day period, and after that by another 14-day period. Beyond that, the regular rules for entering a mental hospital voluntarily or being committed apply. Clearly, how you act at the initial interview with a psychiatrist has a lot to do with how long you stay under psychiatric care. So does the attitude of the psychiatrist who examines you and the availability of good or bad psychiatric facilities in your area.

Rarely are patients held longer than three days for psychiatric reasons. In fact, some hospitals send more than half of the suicidal patients home as soon as they can go. Some patients are routed to state or private psychiatric hospitals; some go to local board-and-care homes or halfway houses or outpatient clinics or nowhere at all. "The only generalization you can make," said Ed Hamell, a senior psychiatric specialist at a private psychiatric hospital in Washington, DC, "is that people who find themselves in hospitals following suicide

Married male, age 40

Jimmy!

Remember what I told you and always respect, protect and obey your mother and always remember that I love you so much. I am going to leave you forever because I am too sick to go on. God bless you my Son and when your time comes to go to Heaven you will find your ole Pappy waiting for you.

Daddy

Single female, age 16

Dear Mother & Dad,

Please forgive me. I have tried to be good to you both. I love you both very much and wanted to get along with you both. I have tried.

I have wanted to go out with you and Dad but I was always afraid to ask for I always felt that the answer would be no.

And about Bud, I want to dismiss every idea about him. I don't like him any more than a companion, for a while I thought I did but no more, in fact, I am quite tired of him, as you know, I get tired of everyone after a while.

And mother, I wish that you hadn't called me a liar, and said I was just like Hap. as I'm not. It is just that I am afraid of you both at times, but I love you both very much.

So Long
Your loving daughter
that will always
love you

Mary

P.S. Please forgive me. I want you to, and don't think for one minute that I haven't appreciated everything you've done.

Single male, age 35 (He committed suicide after he killed his girlfriend.)

Mommie my Darling,

To love you as I do and live without you is more than I can bear. I love you so completely, wholeheartedly without restraint. I worship you, that is my fault. With your indifference to me; is the difference. I've tried so hard to make our lives pleasant and lovable, but you didn't seem to care. You had great plans which didn't include me. You didn't respect me. That was the trouble. You treated me like a child. I couldn't reach you as a man and woman or man and wife as we've lived. I let you know my feelings toward you when I shouldn't have. How I loved you, what you meant to me. Without you life is unbearable.

This is the best way. This will solve all our problems. You can't hurt me further and anyone else. I was a "toll" while you needed me or thought you did. But now that I could use some help, you won't supply the need that was prominent when you need it. So, good bye my love. If it is possible to love in the hereafter, I will love you even after death. May God have mercy on both our souls. He alone knows my heartache and sorrow and love for you.

Daddy

Department of Mental Health

DETAINMENT ADVISEMENT

CONFIDENTIAL PATIENT INFORMATION
SEE CALIF. W&I CODE SEC. 5328

STATE OF CALIFORNIA
DEPARTMENT OF HEALTH
FORM MH 1536B (6/74)
REF: SEC. 5260 W&I CODE

My name is _____

I am a (Peace Officer, etc.) with (Name of Agency).

You are not under criminal arrest, but I am taking you for examination by mental health professionals at (Name of Facility).

You will be told your rights by the mental health staff.

If taken into custody at his or her residence, the person shall also be told the following information in substantially the following form:

You may bring a few personal items with you which I will have to approve. You can make a phone call and/or leave a note to tell your friends and/or family where you have been taken.

To _____
Evaluation Facility

Application is hereby made for the admission of _____
Name

residing at _____, California, for

72- hour treatment and evaluation pursuant to Section 5150, et seq., of the Welfare and Institutions Code.

****

The circumstances under which said person's condition was called to my attention are as follows:

Based upon the above information it appears that there is probable cause to believe that said person is, as a result of mental disorder:

☐ A danger to himself. ☐ A danger to others. ☐ Gravely disabled.

Signature and title of peace officer, member of attending staff of evaluation facility or person designated by county.	Date / Time	Phone
Address of Law Enforcement Agency or Facility		

The People of the State of California Concerning

_____
Respondent

NO. _____

NOTICE OF CERTIFICATION FOR ADDITIONAL 14 DAYS INTENSIVE TREATMENT

The authorized agency providing 14-day intensive treatment, County of _____,

has custody of: _____

Name _____ Date of birth _____ Sex _____

Address _____

Marital status _____ Religious affiliation _____

The undersigned allege that the above-named person presents an imminent threat of taking his own life.

This allegation is based upon the following facts:

_____

_____

Bureaucratic routine with suicide attempters. These are some sections of the forms used (in California) to put suicidal people in psychiatric hold. Police officers or (occasionally in some areas) psychiatrists fill them out for the local courts or mental health agencies. They are based on what a psychiatrist has gleaned by interviewing the patient. In most states the three justifications for holding a person involuntarily are that a psychiatrist feels the person is a danger to himself, a danger to others, or gravely disabled ("unable to provide for his basic personal needs for food, clothing and shelter").

attempts will be treated as not able to be responsible for their own safety."

Howard Blackstone, the clinical director of the Marin County mental health crisis unit, told me some of the things that happen in the initial psychiatric interview. "We're trying to find out what happened. Was it well thought out or was it impulsive? What kinds of problems led up to that point? What state were they in when they tried to do it? How likely are they to try it again? Oftentimes someone will come in upset, but after a day or two hold they will look back and say 'Why the hell did I do that?' If we believe that someone is still perturbed and still ruminating about how to kill themselves, we are required to hold on to them. We evaluate reasons less than states of mind. The purpose of what we're doing is to help someone out of a state of mind where they may do something not in their best interest."

Beyond that, I can't generalize about the psychiatric consequences of suicide. There are too many possibilities, they differ too much from place to place, and the patient has too little control over where he or she ends up. In many psychiatric institutions (and other social welfare institutions, like nursing homes) suicide is a sensitive issue, because a funding agency may investigate an institution if a suicide happens within its walls. Or a psychiatrist may be held responsible for a suicide if it can be proved he knew about it beforehand and didn't act reasonably to prevent it. Here as everywhere else, the main priority is keeping the person alive.

That may be changing. "There are a growing number of people in the psychiatric community," David Gruder said, "who feel privately that their patients, regardless of the law, have the right to decide whether or not to take their own life. Under certain circumstances, there are psychiatrists who won't prevent some of their patients from killing themselves. But you can't talk about this out loud too often, because it's illegal and

could also be grounds for disbarment." He said an influential book for therapists on this subject is **Back to One** by Sheldon Kopp (1977; $7.95 postpaid from Science and Behavior Books, P.O. Box 11457, Palo Alto, CA 94306).

IF YOU BELIEVE, as I did starting this article, that each of us has a right to commit suicide and potentially valid reasons for doing so which should be respected, you might think there's something gruesome about a system which automatically acts to preserve life, whether the person wants it preserved or not. There's an apocryphal story told in every emergency room: someone comes in for the thirtieth or fortieth time on a suicide attempt and a doctor finally explodes and says, "Look, why don't you try it this way," and the patient does next time and dies. Every professional I talked to – doctor, paramedic, suicide prevention counselor, therapist, pharmacologist, nurse – said there have been people who made them think, 'you're right. You have nothing to live for.' But the attempt to save the person's life is always made. As Dr. Richard Fein, who directs outpatient services at San Francisco General Hospital, said, to decide whether someone's life is worth living in an emergency is gross arrogance.

There are people who think suicide can be a method of natural selection in an overcrowded world. Suicides in prisons are often not saved, I was told by several people; the same is true sometimes in some cities, for the indigent suicide, the alcoholic suicide, the aged or non-white suicide. Nobody else wants them; they finally succumb to the obvious. Aren't there people who ought to be killing themselves but are not?

Brr. I'm on the side of saving lives automatically. I liked what Stuart Bair, who counsels many of the desperate and penniless suicide attempters at San Francisco General Hospital, said: "I believe in miracles. I think there's always a reason to hope someone's life will improve." And I like what psychiatrist Michael Simpson said about the terminally ill that groups like Exit and Hemlock are trying to reach: "Those who work with terminal patients, like people in hospices, say there are very few requests for suicide. People want to be relieved of pain, which we could do for nearly everyone if we were given good hospice and palliative care. We need to be sure we've guaranteed mercy living before we get around to mercy killing."

Anyway, I suspect suicidal people are automatically rescued not for their own sakes, but for the rest of us. A suicide death, unless it is rationally prepared for, devastates. The message of a suicide attempt is often: Death is better than the pain you've caused me. And the message doesn't have to come from someone you know. David Gruder,

Single female, age 31

My boss, Kenneth J., seduced me and made me pregnant. He refuses to help me. I had not had intercourse in two years. He says that I will have to suffer through it by myself.

Several people know about this -- my doctor, Dr. James R., and Pete M. who works at Williams. Pete and I never had a love affair, although Kenneth would like to drag Pete into it. Also Dr. Arnold W. knows about it.

I have always been such a good girl.

Daddy dear --

As much as it hurts me, I cannot make it this Friday. I may be in very serious trouble. I have always been a very good person, but it looks like I really got in a mess, through no real fault of my own.

I must have been born to suffer.

Love - Elizabeth

P.S. Call me if you can. When will Sally be back? I may need her desperately.

Married male, age 52

Dear Joan,

For 23 years we lived happy together. Our married life was ideal, until two years ago when I witnessed Kristy die in the hospital something snapped in me. You remember when I returned from the hospital I broke down. That was the beginning of my illness. Since then my condition was getting progressively worse, I could neither work or think logically. You have been thru "Hell" with me since then. Only you and I know how much you have lived thru. I feel that I will not improve and can't keep on causing you and the children so much misery. I loved you and was proud of you. I loved the children dearly and could not see them suffer so much on account of me.

Dear Children:

Please forgive me.

Love, Frank

Divorced female, age 37

To No-one and Everyone:

Because of a growing conviction that a hereditary insanity is manifesting itself beyond my control, I am taking this way out -- before mere nuisance attacks and rages against others assume a more dangerous form.

Because I am an agnostic and believe funeral fanfare to be nonsense -- I ask that it be forgotten. Instead, knowing there to be a marked shortage of cadavers for the medical profession, for which I have endless respect, I hereby bequeath 1) my body to medics for dissection; also 2) To Mark B. all personal effects -- to be divided as whim decrees -- with Dr. Lois J., L.A. and to each -- a deep fondness and love. 3) To Joe A. the greatest devotion -- the kind that "passeth all understanding." 3a) And my life.

Anita R.

4) To my father, Vincent N., the sum of one dollar ($1)

who directed crisis hotlines, told me about a woman who called up and raved: "I've had it. I'm pissed off. I'm killing myself and damned if I'm not going to take someone else with me and you, you bastard, are coming. BANG!" She shot herself. And, as it happened, it was the hotline worker's first call. She went right into a nervous breakdown.

But I believe the main reason a suicide attempt devastates and fascinates us is it reminds us how fragile our own hold on life is. "Here I am struggling along with my problems," Michael Simpson said, "and here's a guy who's given up. Is it possible I'm wrong in bothering so hard to try to live? Once you start discussing suicide you're asking what the grounds are for killing ourselves. The other side of that question is, 'What am I living for?' That's an ugly question for most of us because we don't usually know."

IF SOMEONE YOU KNOW is thinking of suicide, or you think they are, and you don't want them to die, tell them. "Please call me or call suicide prevention before you try anything because I care about you and I don't want you to die." Don't argue with them about why life is worth living, because you can't win that one in rational argument. Tell them how you and other people will feel when they're gone. If there are mental health services you trust in your neighborhood, you may want to suggest them.

If you are scared you may commit suicide, and sometimes you don't want to, there may be more options than you realize. A good guide to whatever mental health services are around and how to find them is **You Are Not Alone (NWEC, p. 327).** It's worth looking around to see if there's a friend, family member, or neighbor that you can talk to about it. Even if, like me, you distrust mental health services, it's probably worth calling suicide prevention. They're listed under that name in the phone book white pages, or call the American Association of Suicidology at (303) 692-0985 for the phone number of one near you.

If you want to make someone pay attention to you through a suicide attempt, you might consider leaving a note for that person and checking into an emergency room and telling them you're suicidal. You'll go through the same psychiatric hold, but without the damage to your body. Choose your emergency room carefully. Some, like Herrick Hospital in Berkeley, often have eight- or ten-hour waits for non-critical patients, in dismal surroundings that will probably make you feel worse.

Or, have you considered changing your life? ■

Trina, a college student, 21 years old

Fall quarter I called Suicide Prevention. I'd called them before and the people were nice, but this time the woman acted a little indignant. "Why the hell do you want to do something like that?" she asked. We talked until she said she had other phone calls. But she made me promise I wouldn't try without calling back first. I had a bottle of Coricidin from a wisdom tooth operation. I'd been thinking about it for a month off and on. Much later that night I took ten Coricidin and went to bed. I woke up in the morning feeling really rotten – weepy, groggy. I could hardly move. I thought I was going to die any minute. My roommate came home and got a friend to drive me to the school infirmary, where they gave me something that made me sick to my stomach. The doctor who gave it to me calmed me down. She said it happens to a lot of people, the pills wouldn't hurt me. I felt tingly, like I might pass out any minute.

I was immediately taken in a wheelchair to the psychiatrist's office. I talked to him about five minutes. He kept yelling at me about why did I take the pills, why didn't I do this or that. I remember thinking, boy this man is a real jerk. I told him I didn't want to see him any more. He said, "That's fine," and put me in a locked room with bars on the windows. I couldn't make phone calls. I felt humiliated, which made me angry. I'm not crazy. I'm not weird. I don't want people to look at me like I'm nuts. I'm not some nutty kid who tried to knock herself off. I was most angry at being stuck in that room. I expected to be put in a straitjacket any minute. I complained until they moved me to a pretty room and let me make phone calls.

I was there about two weeks. My psychiatrist kept harping at me about school – was I going to stay in or drop out? I saw him ten minutes a day. The other patients and one orderly helped me a lot more than he did. I just wanted to find a place where I could be alone and think about things. I left feeling like not much had been accomplished, except letting me know that I didn't want to attempt it again. No – I feel like I've become a lot more sensitive to people. I don't look at their problems as trivial any more. I almost like it when my friends come to me with problems. I feel like I can help now. I still haven't told the two people I was most angry at – my father and my boyfriend – why I was in the hospital. ■

Sandra, a clerk, 27 years old

A year ago March, while I was living in Michigan, I took an overdose of Elavil. I was seeing a psychiatrist and I was just getting off the medication. But the bottle was still in my apartment. I'd gone out and had drinks, came home and that's when I did it – about ten in the evening or so. I called my boyfriend Jonathan in California and my social worker. I told them I had taken the pills. The social worker told me to drive to the emergency room. I'd have been lucky to make it to the front door. Jonathan called a friend of mine, who came to the apartment and broke down the door. I was in a coma for five days. I guess I was lucky because the doctors told everybody I wasn't going to make it. Then they said I'd have permanent brain damage. When it didn't happen they said it was the miracle of the floor. I was out of the hospital in about three weeks; a week of that was in the psychiatric ward, which was a real drag.

I had a lot of problems with my memory for a while. Even now I can't remember some things. Starting a week before the overdose I don't remember anything at all. All I know about it is what Jonathan says I told him over the phone. Everybody asks "Why did you do it?" and I don't know. It sounds real stupid.

Everybody in the hospital was real nice. I was afraid that they would get down on me but they didn't. It was a Catholic hospital, and I had my own room. Friends were there 24 hours a day. It made me realize how many friends I had. On the psychiatric ward they give you tests for brain damage. They ask you a lot of silly questions. They test your reflexes, your memory. They give you EKG tests. It took a while to get back my coordination. I couldn't write or do other things with my hands. Most of the time I stayed by myself. There were programs for the other patients but they didn't put me in any because they didn't know how long I would be staying.

I'd tried twice, but those times weren't serious. I was just trying to get some attention. The first time I was 14, and I slashed my wrists. It was basic adolescent scare tactics. As a result I ended up in an inpatient clinic for teenagers for about five months. Almost everybody there was there because they ran away or they were doing a lot of drugs. The second time was a couple of years ago. I did a Valium overdose. It wasn't very serious – I just had to have my stomach pumped.

This time it shocked me to realize what could have happened to me. I realized how much I had hurt my friends and family, which I didn't think about before. I started wondering if people could trust me. It upset my life a lot – it threw everything backwards. Jonathan flew in from California. He said the scariest part was worrying about having to decide what to do if my body kept living but I had no brain response. When I first woke up I didn't think there would be anything wrong with me. And then it hit me that I couldn't move. I was embarrassed that people had to see me like that.

Once you're out of the hospital a lot of institutions won't hire you. You can't get health insurance. You have to lie on your job applications. People look at you like you're dangerous. It's real scary for some of my friends – they think they're responsible. Trying to convince people that I was OK was the hardest thing. That they didn't have to watch over me, that I wasn't going to try it again. ■

Thomas, a hairdresser, 21 years old:

I tried it five years ago. I was at a neighbor's house and fired a gun at my head. Nothing happened; it seemed empty. I fired it at a wall and put a bullet in it. So a minute later I found some Seconals in a medicine cabinet. I remember watching cartoons and taking the pills one by one. A neighbor lady found me and couldn't wake me up. I couldn't open my eyes or move, but I heard everything. I remember the lady shaking me and saying, "Oh, my God." I remember the ambulance people taking off my clothes and making me throw up. There wasn't any pain. I don't remember having my stomach pumped.

When I woke up it was five days later. A big black lady kept tickling me. " 'Bout time you woke up," she said. "I've been tickling you for three days." I thought I was in heaven – it looked like some place in heaven for the misfits. Turned out I was in the basement of a free clinic, a long room with rows of beds with all kinds of teenagers, pregnant girls, suicides, drug addicts. We walked around in gowns, smoking cigarettes and watching TV. The reason I tried was I was angry at my mother, but when she came in she just said, "Why'd you do this – to try to get attention?"

Am I glad I was rescued? Oh yeah. I was so glad I didn't die. It made me realize how much I appreciated myself, because I had a glimpse of what I might have lost. I had some friends and I would've missed them. I didn't have to go home after that. They put me in a foster home. The State made me go to a psychiatrist. I never liked the man. I thought he had more problems than I did. I felt drugged and slow for a couple of years. Every now and then I'd take speed to feel normal. Downers still make me feel speedy. If I had a suicidal friend now I'd ask them, "Why don't you have any alternatives? Could it really be so awful?" That's what I say to myself now. ■

How to Die with Dignity

Let Me Die Before I Wake

All the preceding words still don't address people facing a lingering, painful terminal illness or encroaching oblivion who want to die because they cannot seek other options (like hospice care or pain relief centers). These books tell specifically how to die, by relatively peaceful, relatively painless methods.

Both Scottish Exit (publishers of **How to Die with Dignity***) and Hemlock (publishers of* **Let Me Die Before I Wake***) require you to join their group and fill out an application form before they send their publication. Scottish Exit members sign a statement that they will not copy the book or show it to anyone and that they will destroy it before they do the deed. Hemlock members are advised to be cautious. Recipients are expected to observe the honor system. Both organizations state they have a waiting period of three months before they send the books, but Scottish Exit sent ours within a couple of weeks.*

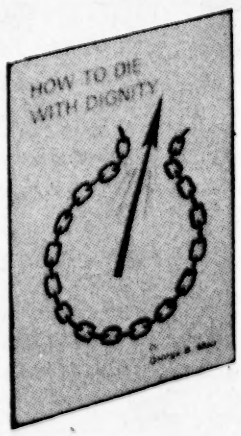
How to Die with Dignity *is short (31 pages plus a 13-page supplement). Much of it consists of reasons why to rationally commit suicide, methods to avoid and fine points of Scottish law. A chart gives lethal doses of different brands of sedative drugs, and there are matter-of-fact descriptions of six specific methods in detail (involving drugs plus: electrocution; drowning; freezing; auto exhaust; suffocation). They're gruesome, not because they're sensationally horrible, but because they make you realize that dying is a hard, complex, mundane process. (A description of normal hospital treatment for the dying would be equally gruesome.) A few people I know who had idly considered suicide gave up the thought for good after looking at this book.*

Let Me Die Before I Wake *is longer, more journalistic, not nearly as direct. It contains seven true case histories, written in high melodramatic style, of terminally ill people who sought death or people who performed mercy killings. Author Derek Humphry weaves the specific dosage information into each story, an effect that seems meant to be casual but actually jars. The stories themselves are usually very moving. A more comprehensive chapter on methods follows, and another follows that on preparing the people around you for your death. There is also a full history of the voluntary euthanasia movement, a history of attitudes toward terminal illness, and an appendix about legal risks.*

I've been asked why, after writing that attempted suicides should be automatically saved, I still wanted to review these books. I feel that a few people may need them directly (although it's absolutely worth checking out other options first). More important, reading about voluntary euthanasia makes suicide seem closer to what it should be: not a romantic escape (that leads often instead to the emergency room), but a tedious act that makes you realize why life is valuable. —*Art Kleiner*

How To Die with Dignity
George B. Mair, M.D.
1980; 41 pp.
(including supplement)

£20 postpaid (about $50; includes membership) plus three-month waiting period
from:
Scottish Exit
Upper Kinneil House
Polmont, Stirlingshire
FK2 0XZ Scotland



Let Me Die Before I Wake
(Hemlock's Book of Self-deliverance for the Dying)
Derek Humphry
1981; 102 pp.

$25 postpaid (includes membership) plus three-month waiting period

Membership alone (includes quarterly newsletter)
$15 /year
both from:
Hemlock
Suite 101
2803 Ocean Park Blvd.
Santa Monica, CA 90405

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Arrange 'timing' so that at least 16 hours of total privacy can be ensured.

It may be possible to use a hotel room. If so request Reception not to transfer telephone calls to your room and give as explanation that you are tired and do not wish to be disturbed.

When in the room hang the DO NOT DISTURB notice outside the door. If using a hotel try to be in bed by 1600 hours (04.00 p.m. since staff can become active before 0800 hours (08.00 a.m.)

If using a hotel it is suggested that a short letter is left to thank the manager and apologise for abusing hospitality. This should be left by the bedside together with 'reminder letters' to family doctor, solicitor and friend(s) recalling earlier documents signed perhaps years earlier.

Finally, it is useful for the Police if a note is left stating what drug has been used — and why — and giving names of doctor, solicitor and family. This will minimise 'formalities.' —**How to Die with Dignity**

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Methods of Self-Deliverance Which Should Not Be Used

1. Jumping from other than an exceptionally high building carries no guarantee of certainty.
2. Use of a knife is both painful and uncertain.
3. Use of a rope, is distressing to victim and — more than most other methods — to family and friends.
4. It is exceptionally unwise to attempt to jump in front of trains, motor buses or other vehicles. Results are unpredictable.
5. Jumping into the sea from a ferry or other deep sea vessel is highly inconvenient for the ship's crew and passengers. It is also, curiously, often also uncertain in that 'rescue' may arrive from some unexpected quarter such as an un-noticed fishing smack.
6. Jumping on to the live rail of an electric rail system is not in any way dignified and is a great offence to witnesses.
7. Death using a gun is not always successful either and the author has seen cases of survival following bullet wounds which entered an eye and apparently left the back of the head. Nor is the method 'dignified.' Tradition will have it that death by a bullet is a death of a soldier. We are not all soldiers! Nor do soldiers — even with shocking and multiple wounds — all die.
8. Aspirin and paracetamol should not be used since results are unpredictable. Recovery is often associated with kidney and liver damage.
9. Attempt to crash a car even moving at a very high speed is extremely uncertain and should be avoided.

—**How to Die with Dignity**

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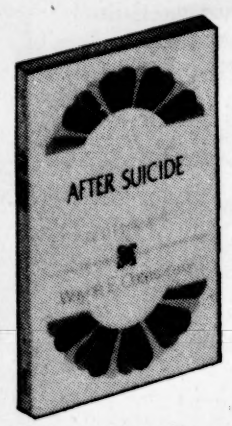
It's an obvious point — but one often overlooked for whatever reasons — that people who have decided to die alone because illness has made their life unbearable must decide to act before becoming absolutely dependent on others. It is necessary to decide in advance on the method and secure the means, and then act when there is no risk of interference. The means must therefore be fairly fast-acting and, as our stories have indicated, with drugs this is not always so. (Of course, if a person has decided to use a gun, these difficulties do not arise. But I have probably talked to more people intending voluntary euthanasia than most and have yet to meet one who plans their eventual death by shooting. A very few have decided on the car exhaust method.)

—**Let Me Die Before I Wake**

After Suicide

How to recover from the devastating fact that someone you love has committed a suicide at you. This book has what you wouldn't expect from a series called the **Christian Care Books***: lots of insight, some solid taboo-busting, no rejection of non-Christians and hardly any preaching.* *—Art Kleiner*

After Suicide
John H. Hewett
1980; 119 pp.
$6.55 postpaid from:
Westminster Press
P.O. Box 718
William Penn Annex
Philadelphia, PA 19105



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You are going to feel a constant temptation to take a short backward look. Take a long one instead. People have been purposely taking their lives for thousands of years. Suicide shows up in all kinds of societies and throughout every historical epoch. It is as ancient as humanity itself. It occurred among the ancient Hebrews. The Greeks and Romans also were plagued with the problem of self-destruction. They held a hard-line position opposing it, except for the Stoics and Epicureans, who adopted a softer approach. The early Christian church was forced to take stern measures to deal with the epidemic of suicides that took place. So many believers were eager to gain heavenly glory that martyrdoms became commonplace. Augustine, and later Thomas Aquinas, labeled suicide a mortal sin equivalent to murder. With a few exceptions, they gave the church's sanction to the civil laws against the act.

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A touchy issue must be discussed here. You will have to decide what to do with the suicide note, if one was left behind. This has the potential to be a major source of hurt and disappointment for you in the future. Talk about it with your family before you do anything, but face this question *soon.* Don't let this note rattle around your dresser drawer for ten years of indecision. If you think it will only bring you pain, then have a private, symbolic burning, and commit its contents to the memory of God.

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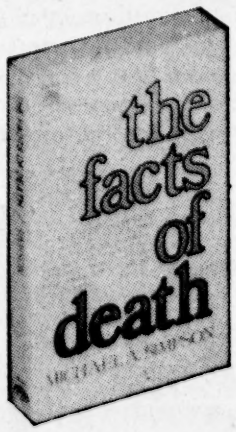
Those well-meaning souls who bustle up to your older children and exclaim, "Now, you've got to be brave and take care of your dear mother (or father)," do your children great harm. You have to ensure that this doesn't happen. *Don't make your children take care of you.* A fourteen- or fifteen-year-old boy is not prepared to be either the "man of the house" or your substitute husband. Also, be careful about forcing your surviving children to make up for the loss of a child who completes suicide. No one can replace a lost family member — no one. And no one should ever be the square peg forced into a round hole.

The Facts of Death

Unlike most authors who suggest their own books for review, Michael Simpson was right. If you're looking for a sympathetic, knowledgeable guide to dealing with the prospect of your own death or the death of someone close to you, look here. There's a lot of thought-provocation about the place of death in our culture; plus a very good annotated bibliography and an access guide to hospices, pain clinics, widow-to-widow projects, and death and dying groups. Best is the way he cuts at the manipulators who seek to make money off someone else's grief. *—Art Kleiner*

The Facts of Death
(A Complete Guide
for Being Prepared)
Michael A. Simpson
1979; 276 pp.

$6.20 postpaid from:
Prentice-Hall
P.O. Box 500
Englewood Cliffs,
NJ 07632
or Whole Earth
Household Store



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A much more practical concept [than cryogenics], but one less likely to have general appeal, is the potential cultivation and harvesting of the dead. After brain death, the body could be maintained with persistent basic functions. One would have a cadaver, fully legally, personally, and spiritually dead, and with a dead nervous system — but warm, breathing, and with heart beating (with mechanical assistance), excreting, and requiring feeding, nursing, and haircuts. Dr. Willard Gaylin of the Institute of Society, Ethics, and the Life Sciences in Hastings-on-Hudson, New York, has explored the possibilities (1974). Such newly dead functioning cadavers, which he calls *neomorts*, could be maintained in body banks or what he calls *bioemporiums*. Medical students and young doctors could practice physical examinations, technical procedures, and operations on neomorts rather than on live patients. Experimental surgery techniques could be performed, and new drugs and vaccines tested very reliably and without risk to the living. Diseases could be induced to allow comparisons between different treatments. Organs would be available for transplant after careful testing of compatibilities. The neomorts could supply blood for transfusion ("like a saw-mill produces sawdust," in Gaylin's words), as well as several rarer blood constituents. Antitoxins and antibodies could also be produced by them.

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My closest approach to death, perhaps, was when I was attacked by a highly disturbed patient who tried to strangle me. He grabbed me efficiently from behind, and because I knew him to be a judo, jiu-jitsu, karate, and aikido enthusiast, I knew I had little chance of releasing myself by physical force. As he increased the pressure, my consciousness began to fade. There was a rushing noise in my ears, but I felt very alive, clearheaded, and alert. I seemed to be out of my own body, somewhere behind both of us, watching. I revolved between three mainstreams of thought. One, with a mixture of sadness, annoyance, and anger, was concerned with how much the patient would lose. His situation was desperate, but I had not yet begun working with him, and I was sure he could achieve a great deal. "But if he kills a doctor," I thought, "he's had it!" I conveniently overlooked the fact that I would also have "had it." The second line of thinking was a great swell of humor. Knowing how much I enjoy talking, it seemed a splendid irony that I should have to die speechless. "Damn it, Simpson!" I thought, "you'll get no famous last words!" The third stream of thought was a quiet mulling over of the question of whether there was, in fact, anything whatsoever I could do to save myself. It seemed very unlikely — he was strong, frenzied, and not thinking clearly. Any attempt at force on my part led him to grip harder still, and I had little consciousness left. I wanted to get through to him with something unexpected but nonthreatening, something that might just indicate that I meant him no harm. So, as I began to fade out, feeling as if I were falling headlong down a narrow grey tunnel, I stroked his arm very, very gently. (He said, afterward, that it puzzled him, and he let go to think about it. He was sure that a violent response from me would have let him finish the job promptly.) I recovered quite rapidly, and we later became firm friends.

Home Care

This book began as a simple list of helpful suggestions the author and her bedridden husband — he had cancer — drew up for friends who asked their advice on caring for chronic illness at home. She describes the support services available from doctors, nurses, pharmacists, and physical therapists; the different services available (acute care, skilled nursing, physical or occupational therapy, rehabilitation centers, etc.) and when each is appropriate; getting the home ready; charts; medications; diet; pain; burnout risk for the caretaker(s); working with hospice organizations, and much more. There is also a chapter on schooling and other special needs when the patient is a young person.

A warm, soft-spoken, comforting, empowering book.
—Tom Ferguson, M.D.

Home Care
(A Practical Alternative to Extended Hospitalization)
Evelyn M. Baulch
1981; 260 pp.
$9.95 postpaid from:
Celestial Arts
231 Adrian Road
Millbrae, CA 94030
or Whole Earth Household Store

DAILY CARE CHART

For *Larry Baulch* Date *Thurs. June 3 1976* (Day Month Date Year)

MEDICATIONS:

Combid: (one tablet two times per day-before lunch and dinner)	*11:30 a*	*5:45 p*		
Dexymyl: (one tablet four times per day—8, 12, 4, 8)	*8 a*	*2:30 p*	*4:15 p*	*8:40 p*
Provera: (five tablets three times per day)	*10:10 a*	*2:30 p*	*10 pm*	
Prednisone: (one tablet before breakfast)	*7:30 a*			
Vitamins: multi, B, C, E, minerals	*9 a*			
Demerol: (every four hours as needed			*Dem 50 mg 10 p shot*	
Percodan: for pain)	*Perc 5:40 a*	*10:45 a*	*4 p*	

TREATMENTS

Sugar test: *Neg* Morning
Neg Afternoon
Compress solution 4 p, 9:30 p

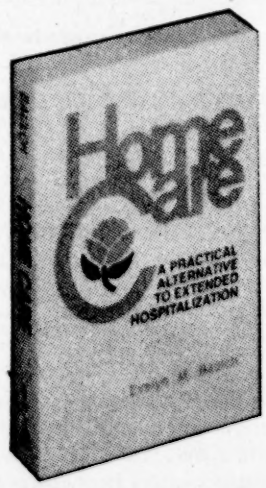
PHYSICAL THERAPY
Mary Kirkpatrick 11 a.m. (1 hr.)

ACTIVITY
Up on Hodge 2½ hr.
At dinner time 6:30 - 9 p.

COMMENTS
Blisters appeared with redness under left upper arm
Called Dr.
Dr. visited at 1 pm
Diagnosed shingles
New Order —
Domeboro Powder/Solution
Cool wet compress 4 times daily

Bath *10:30 a*
Diet *Reg*
B.M. *10 a Good*
Liquid input *1900*
Urine output *1400* *10 pm*
Temperature *8a 98°*
Blood pressure *100/77*

Visitor *8-9 p* *Jack, discussed photography, planned an article with Larry writing/Jack's photos.*



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When you are caring for a patient at home it is *very important* that you have a chart. This not only serves as a reminder on treatment needed but it is also an accurate daily record of patient care. The chart should be prepared while the patient is still in the hospital as soon as the doctor gives you the orders. All information about required care and medication must be on the chart.

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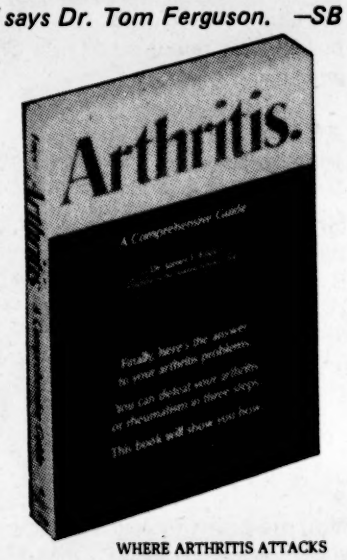
One of the things a chaplain does is comfort people. I asked Walt how he does this. He explained, "I'll give you my definition of comfort. Comfort is quite different from what most people think it is. Most people think that comfort is saying, 'There, there, it's going to be all right, Evelyn. You just see this through. I know it's miserable now, but it's going to be all right.' Comfort (from Latin) has been twisted. We usually think of the person being weak, that we will bring our strength to the person.

The Latin prefix COM means '*with*.' And the FORT is from *forte*, meaning 'strength.' Comfort literally means 'with strength.' So when I comfort a person, I depend on, count on, and know that deep within them, are strengths that they are not aware of, that they will discover as we talk about what is really going on. I can confront them with a reality. We can face the realities together. And I know that if we face the realities together in an atmosphere of love and caring, that strength is going to come from within them."

Arthritis

Happily there is a disease-specific medical self-care literature developing. We will be trying to identify the best one for each ailment. This is the one for arthritis — an "excellent, excellent book" says Dr. Tom Ferguson. —SB

Arthritis
(A Comprehensive Guide)
James F. Fries, M.D.
1979; 258 pp.
$7.95 postpaid from:
Addison-Wesley
Publishing Company
Jacob Way
Reading, MA 01867
or Whole Earth Household Store



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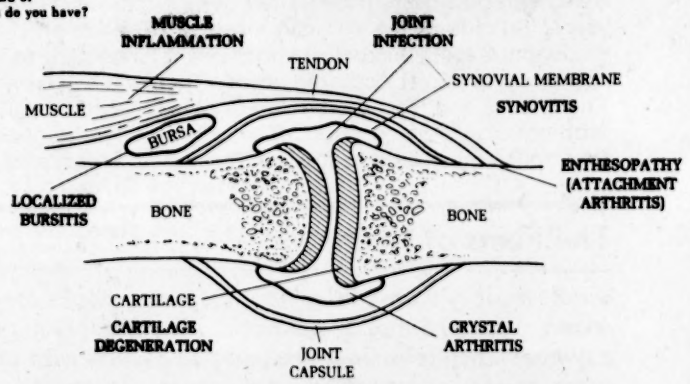
What kind of arthritis do you have?

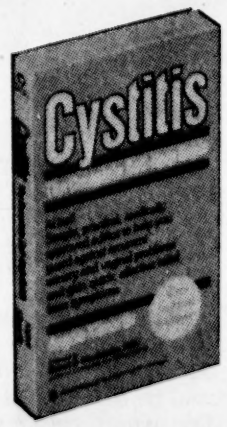
WHERE ARTHRITIS ATTACKS



Cystitis

Too many women suffer from cystitis, yet little is done to encourage the self-help that prevents as well as relieves the pain of an attack. This excellent book not only reviews the research that uncovered the simple steps to take, but answers many questions relating to bladder and vaginal irritations. Includes chapters such as Achieving a Diagnosis, Cystitis in Childhood, Liquid Intake, Acidity and Diet, Washing, Intercourse, Men, and Depression and Tension. Highly recommended. —Eileen Yorysh

Cystitis
(The Complete Self-Help Guide)
Angela Kilmartin
1980; 208 pp.
$6.70 postpaid from:
Warner Books
75 Rockefeller Plaza
New York, NY 10019
or Whole Earth Household Store



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On the first sensations of an impending attack start to drink. Drink water-based liquids, i.e., flavored only; no concentrates of any kind. First you will drink a pint of water, hot or cold, mixed with a teaspoonful of sodium bicarbonate. Every twenty minutes for the next three hours you will drink a half pint of water, flavored either as a weak tea, diluted fruit soda (*not* juice!), or just ordinary cold water. Within thirty to forty minutes you should begin to go to the toilet frequently, and although the first couple of times may sting, this will go away as more and more water arrives in the bladder.

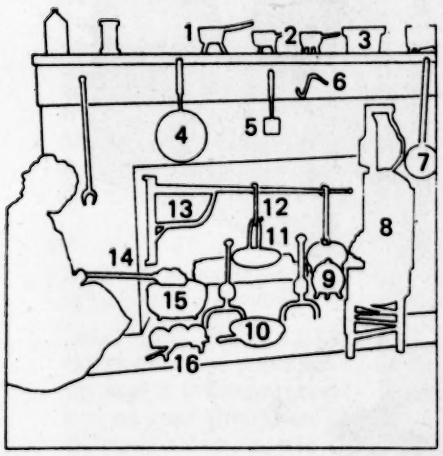
Back to Basics

Mixed emotions on this one. That it competes directly with **The Whole Earth Catalog** *I dearly love. That it has the usual Reader's Digest clarity of exposition and illustration further recommends it. The range of coverage is astounding — buying country land, homebuilding, heating and cooking with wood, home crafts, gardening, camping, etc., etc., etc.*

The hitch is the briefness and shallowness on each subject. You are told why this kind of activity is good, why it is enjoyable, then a couple of projects are spelled out in detail, and it's on to the next subject. For in-depth how-to, this is not the book. For comprehensive shopping in a department store of virtuous and esthetic things to do, it's handy. There is a creditable bibliography on each subject, unannotated alas.

Would it be possible to take on a complete back-to-basics life equipped just with determination, ingenuity, and this book? Possible I suppose. Might be interesting to try.

—SB



Key to photograph: (1) Bell metal spider pot, (2) Cast-iron spider pots, (3) Brass jelly pan, (4) Grill, (5) Spatula, (6) Pot-hook, (7) Large ladle, (8) Liverpool reflector oven, (9) Kettle, (10) Skillet with bread, (11 Hanging griddle, (12) Jack iron, (13) Hinged crane, (14) Peel with coals, (15) Dutch oven, (16) Toasting rack. Most of these implements were basic to traditional fireplace cookery.

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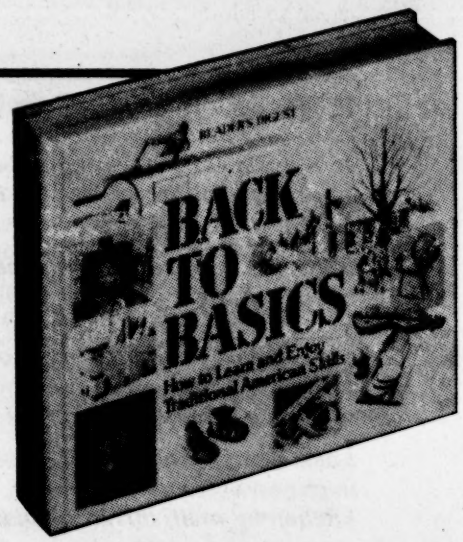
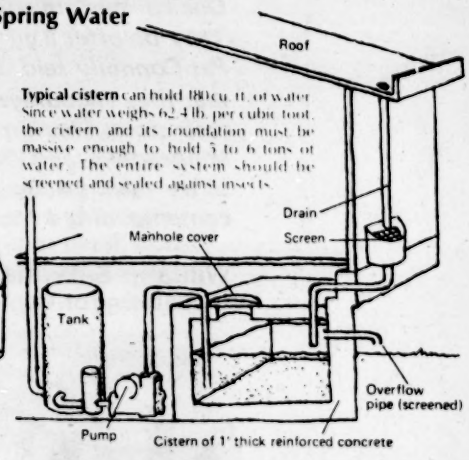
The open fire is an amazingly versatile cooking device. One fire can be used to boil water, simmer a stew, bake pies, bake flat loaves of soda bread, and roast several pieces of meat. At the same time, sausages and hams can be hung nearby to be smoked slowly by the fire day after day.

Back to Basics
(How to Learn and Enjoy Traditional American Skills)
Norman Mack, Editor
1981; 456 pp.
$20.50 postpaid from:
Book Department
Reader's Digest
Pleasantville, NY 11570
or Whole Earth Household Store



Ways to Collect and Store Rainwater and Spring Water

Spring water collection structure, formed primarily of concrete, helps stabilize water flow and protects water from surface contamination. Take care when excavating to avoid disturbing the fissures, otherwise the flow can be deflected.



Typical cistern can hold 1800 cu. ft. of water. Since water weighs 62.4 lb. per cubic foot, the cistern and its foundation must be massive enough to hold 5 to 6 tons of water. The entire system should be screened and sealed against insects.

Future Harvest

Life Tools Co-op

Two new good sources of homestead equipment. Future Harvest has more variety; Life Tools has better prices ($188 for a Champion Juicer instead of $223, for example).

—SB

Future Harvest
Catalog
free from:
Future Harvest
3999 South Main Street
Salt Lake City, UT 84107

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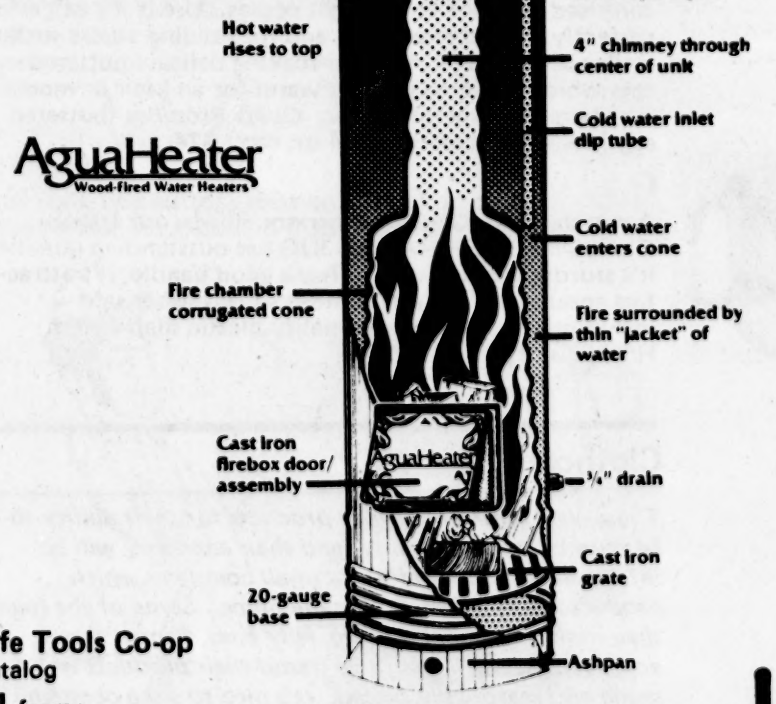
Deluxe Handcrafted Fireside Bellows

The quick way to a roaring fire. Whether you want a blazing fire or just to rekindle a dying flame, simply direct air into the heart of the fire. Handcrafted hardwood sides handrubbed with Danish Walnut Oil. All Naugahyde leather trimmed with decorative nails. Nozzle finished from solid brass. 8" x 18"

391 Deluxe Bellow 2 lbs. $29.08

—Future Harvest



Life Tools Co-op
Catalog
$1 from:
Life Tools Co-op
401 North Clay
Green Bay, WI 54301

AquaHeater Wood-fired water heaters. $207 to $378.
—Life Tools Co-op

→

The Quick and Easy Way to Hand Washing-Rapid Washers

By raising and lowering the Rapid Washer, the water is rushed through the clothes, gently removing grit and grime from the fabric. Heavy tin coating with strong lock seams. Northern fir handle. 8½" dia.

207 Rapid Washer Wt. 3 lbs. $9.50

—Future Harvest

Williams-Sonoma Catalog for Cooks

In this part of the world, Williams-Sonoma is nearly reason enough to get married in hopes of scoring some of their inventory as gifts.

They stock a comprehensive selection of the best cooking equipment, from ovenware and serving pieces and stoves to non-skid flooring. Many of their handsomest items they import directly. Like most good tools, these are pricey. They're worth it in the long run however, for the savings in anguish and scorched dishes.

Local comparison shopping for some of these things might save you a little money, but if you're outfitting a kitchen by mail, this is the place to begin.

One curious omission from the current catalog — knives. They do offer a gift set at Christmas, but vice president Pat Connolly said that Williams-Sonoma knives are so luxe that they encourage prospective buyers to come in to their stores (four in California, one each in Dallas, Minneapolis, and Washington, DC) armed with vegetables to try them out on. This is some serious cooking we're contemplating here. —*Stephanie Mills*

Williams-Sonoma
(A Catalog for Cooks)

free from:
Williams-Sonoma
Mail Order Department
P.O. Box 3792
San Francisco, CA 94119

←

Serious cooks and novices alike will appreciate this handsome, handcrafted COPPER DOUBLE BOILER by Waldow. It is an American classic: the heavy copper construction for durability and beauty, and the thick china insert for perfect heat distribution are not to be confused with the lightweight copies. Use it for achieving perfectly melted chocolate, and for holding sauces such as Hollandaise. Use it, too, for making delicate buttered eggs which can then be kept warm for an hour or more over barely simmering water. *Oeufs Brouillés* (buttered eggs) recipe included. 1-3/4 qt. cap. $74

←

A match to the Glass Refrigerator Bowls, our Italian GLASS REFRIGERATOR JUG has outstanding qualities: it's sturdy; it pours well; it has a good handle; it's attractive enough for the table; and it's dishwasher safe — including the extra-heavy quality plastic snap-on lid. Holds 33 oz. Ht. 6" $7

Clothcrafters

Those who appreciate cloth products for their ability to be reused, their durability, and their economy will be interested in Clothcrafters, a small company which produces cloth products for the home. Some of the items they make are insect netting, jelly bags, flannel sheets, and sleeping bag liners. I've found their products well made and reasonably priced. It's nice to see a company dedicated to making something reusable for a change.
—*Paula McKeown*

Clothcrafters
Catalog

free from:
Clothcrafters
Elkhart Lake, WI 53020

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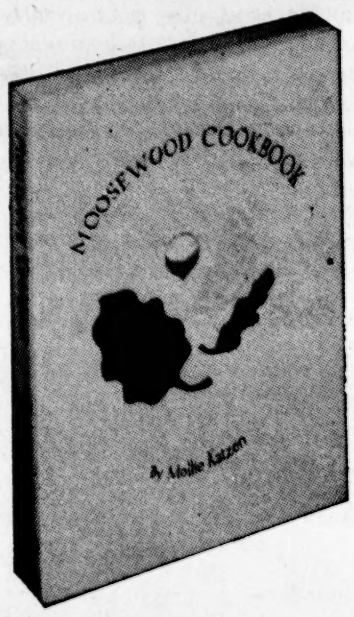
Bulk Cheesecloth (two yards) $2
40 inches wide. Because cheesecloth is so useful for a variety of purposes, and because we find that this high quality cheesecloth is not generally available to the consumer, we offer it in two yard quantities.

Moosewood Cookbook

Vegetarian cookbooks rarely give an idea of the extraordinary richness and variety of non-meat cuisines. They tend to blandness, triteness, and flatulence. An outstanding exception is **Moosewood Cookbook** *from the people who created the Moosewood Restaurant in Ithaca, New York. The recipes are unusual, inventive, and delicious enough to convince even hard-core meat eaters that vegetarian meals can be completely satisfying. Some of the recipes are overly complicated and can be simplified to advantage; also, the index is hard to use. These are minor complaints, however. Try the Russian Cabbage Borscht, the Salsa Yucateca, the Indonesian Gado-Gado, or the Mushroom Strudel to get a sense of how good these dishes are.*
—*Andrew Weil*



The Moosewood Cookbook
Mollie Katzen
1977; 222 pp.

$8.45 postpaid from:
Ten Speed Press
P.O. Box 7123
Berkeley, CA 94707
or Whole Earth
Household Store

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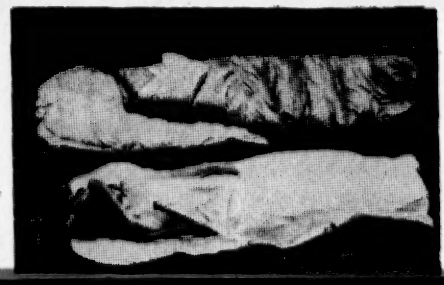
Sleeping Bag Liner $12
Double $24
The same soft 100% cotton flannel makes a cozy, washable liner that feels good and keeps the sleeping bag itself clean. Use it alone in warm weather, in tent, cabin, or boat. 84 inches long, 35 inches wide at shoulders, tapered slightly toward foot. Expect 5-10% shrinkage in length.



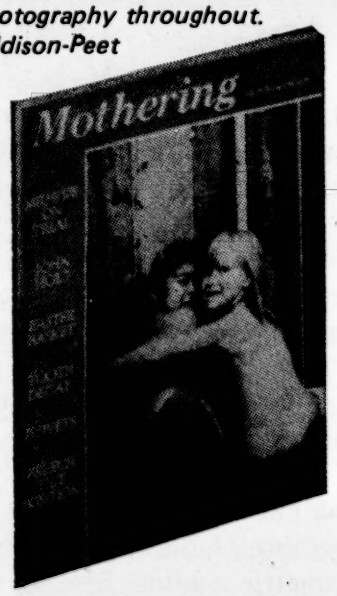
Mothering

I've subscribed since issue #6, Winter, 1977, and have watched **Mothering** *evolve from a warm, visually attractive, down-home and relatively unsophisticated new publication to a warm, visually attractive, down-home, broader and more professional alternative "family" magazine. While the mechanical quality has improved,* **Mothering** *has retained a special feeling of intimate communication with and between its readers.*

Now five years old with a readership of 36,000 and growing, **Mothering** *is a quarterly publication about the "art of nurturing." Regular feature sections include: The Art of Mothering, Family Health, A Child's World, Pregnancy and Birth, Midwifery, Alternative Education, and Mother to Mother. Each issue also offers articles on home cooking, fathering, breastfeeding and family centered business, as well as an ongoing dialogue between readers, comprehensive reviews of related books, and unique black and white photography throughout.*

—Katy Addison-Peet

Mothering
Peggy O'Mara McMahon, Editor
$10 /year (4 issues) from:
Mothering Publications
P.O. Box 2046
Albuquerque, NM 87103



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Marlene Anne Bumgarner: *Why home schooling?*

John Holt: That's a big question. The great advantage is intimacy, control of your time, flexibility of schedule, and the ability to respond to the needs of the child, and to the inclinations. If the child is feeling kind of tired or out of sorts, or a little bit sick, or kind of droopy in spirits, okay, we take it easy, and things go along very calm and easy. When the child's full of energy and rambunctious, then we tackle big projects, we try tough stuff, we look at hard books. And I think schools could do much more than they do in this kind of flexibility, but in fact they don't. I want to make it clear that I don't see home schooling as some kind of answer to badness of schools. I think that the home is the proper base for the exploration of the world which we call learning or education. Home would be the best base no matter how good the schools were. The proper relationship of the schools to home is the relationship of the library to home, or the skating rink to home. It is a supplementary resource.

Metrifast microwave radiation leak detector

A cheap test for microwave leaks at 2450 MHz, the frequency used by microwave ovens and certain medical and industrial equipment. A safe microwave oven can save lots of energy in addition to cooking things fast. This instrument should help settle arguments and calm fears. Or reinforce fears — at least you'll know. (By the way, this company makes metric fasteners, not always easy to find).

—J. Baldwin

Metrifast Microwave Radiation Leak Detector

$15.95 postpaid from:
Metrifast
51 South Denton Avenue
New Hyde Park
New York, NY 11040

Orange Cat Goes to Market

When I became pregnant with my daughter, I rushed to the bookstore to find some good books on childbirth, pregnancy and kids. I was met there with a confusion of books and had no one to guide me to the best. Six months after my daughter's birth I discovered Orange Cat Goes to Market — a bookstore and mail order business with a fantastic catalog of birth (raising your kid, being pregnant, nursing, etc.) books. The books are reviewed by Kathy Epilog who begins to feel like a friend as you read her opinions about them. Both informative and personal, the catalog has illustrations and interesting quotes.

—Loretta Hirsch

Orange Cat Goes to Market
Catalog

free from:
Orange Cat Goes to Market
442 Church Street
Garberville, CA 95440

●

CommonSense Childbirth by Mrs. Lester Hazell

This is the book most highly recommended by my own midwife (alas, I didn't see a copy until after Garth's birth). A very fine guide for both mothers and fathers. Detailed section on home births — what you need, what to do if something unexpected happens, how to prepare for labor, etc. Paperback $3.05

Victorian attire

Olord, this could well be a direction of the '80s, which Tom Wolfe, no less, has forecast as the "purple decade" when people will dress with prosperous display. So it was in the 1880s after all.

I haven't seen the quality of the goods in this catalog of some 30 fancy items, but the catalog makes me want to.

—SB

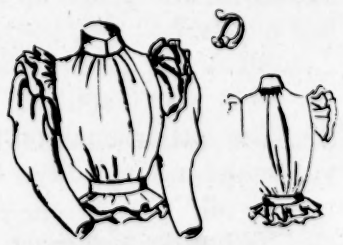
Victoriana Revived
(Custom Made Attire)
Nelson Arriaga, Tailor
Catalog

free from:
Victoriana Revived
418 Grand Avenue
Brooklyn, NY 11238

↓

1878 - Albert

Sack coat, one button, contrasting vest on request. 100% wool flannel, imported, in black, navy blue, brown. $300



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All blouses hand finished. Fabrics also available in stripes, checks, plaids, and polkadots. Fine cotton laces.

In all sizes (8 - 16)
Taffeta $120.
Cotton $90.

THE DAY THEY TESTED THE REC ROOM

by Paul Brians

FROM WHERE DERYL'S HEAD LAY flat against her flat belly he could sight along her candlelit body as if she were a landscape stretching off into the distance with the cloud of pubic hair hovering on the horizon. He was lost in it, breathing slower and slower, feeling the warmth radiating from his skin, the strands of wet hair plastered against his cheek, cooling. But what came into focus and fascinated him was the pool just a few inches away, filled with salt water. He began to imagine her navel surrounded by reeds, geese flying overhead. He would be Thoreau and live by this pond forever. . . . But as he began to imagine building a shack there he laughed.

"What is it?"

"Crystal, you have the most amazing navel."

"Thank you, but is that any reason to laugh?"

He pulled himself up on his elbow and looked at her puzzled face.

"I'm sorry. It wasn't you. I was just thinking of your navel as Walden Pond. It's so deep and beautiful, and it fills up when we make love on hot nights."

"It does? Let me look."

"No, you'll spill it."

She settled back on the bed. "All right, but you make me feel silly. I'm not the earth mother type at all."

"What do you mean?"

"Just joking . . . though I do mean something . . . Let me see, what do I mean? Oh, Deryl, that was nice."

"What were you going to say?"

"Uh, let's see. My brain doesn't work too well after fucking. Oh, yes. I just meant my own fantasies are extraterrestrial. When I come I go off like a rocket. I soar through space." She shuddered.

He sat up, drew his knees up in front of him, and cleared his throat. "Actually, I have something to tell you that might make those fantasies come true."

"What do you mean?"

"How would you like to take a trip to Buckminster IV?"

She sat up abruptly. "Don't kid me now. You know I'd like to go into space more than anything. I didn't join the program just to take biometric readings here on the ground."

"I know, you've been hassling Sunpower command from the minute you came here to get into the astronaut program. I have found a way."

"For God's sake, talk!"

"Well, this will need a little explanation. As we officers say, 'Let me briefly go over the background.' "

"Shit," she said, and lay back down, waiting for grinning Deryl to go through his performance.

"My dear colleague, you are familiar, no doubt, with the fact that among the long term crews of the Sunpower satellites certain regulations have long been resented and protested, to wit: those regulations pertaining to physical contacts between personnel."

"No screwing in the sky. SunCom is incredibly old-fashioned, but you'd think the crews had nothing else to kvetch about. If I had the chance to spend six months on a Sunsat doing real work I'd be glad to be chaste as a nun."

"That's what you say now, but it's a serious problem. Those young, mostly attractive crew members live crammed into a sat with all their juices bubbling, with no privacy and SunCom peering over their shoulders all the time. The early astronauts went on shorter duty tours, and they were almost all men – hetero men at that. They resigned themselves to it. But of course when the crews were integrated, the pressure began to

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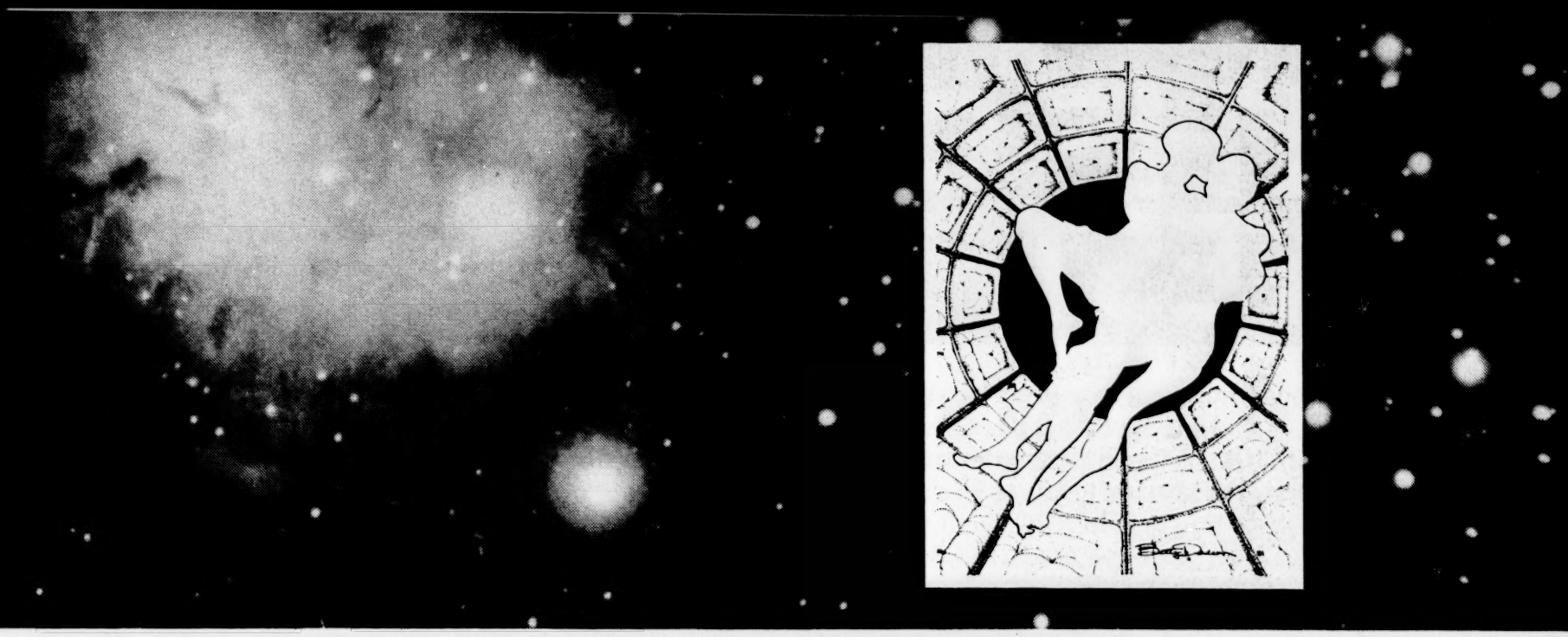
Everybody's unspoken question about life in space explored in appropriate detail by an Associate Professor of English at Washington State University – "I am trying to show that science fiction can be both humane and optimistic." Illustrator Betty Dodson, whose ***Liberating Masturbation*** *is one of the best sellers of the* ***Next Whole Earth Catalog****, commented, "The image that captured my imagination was the hands like seaweed . . . my original drawing got sold right off the board. Everytime I draw a picture of two women making love, I sell it. Do you suppose the goddess is trying to tell us something?" –SB*



ALL PHOTOS FROM THE RAND McNALLY NEW CONCISE ATLAS OF THE UNIVERSE

build. In addition, after you get used to it, free fall is a very sensuous experience. Even in the short periods I spend waiting for them to unload my shuttle I've felt it."

"So what's this got to do with me?"

"Wait. The next element in the situation presently facing us, dear colleague, is the recent passage of the Sexual Freedom Amendment. Since now all nonviolent acts between consenting adults are a constitutional right, SunCom cannot continue to forbid its personnel from doing what they want. The union has hired a lawyer to force them to build rec rooms to allow for sex, which they have done."

"What? I haven't heard about this. When did all this happen?"

"It's all been very quiet. SunCom has visions of Senator Palmer rising to demand why the public's precious dollars are being spent to pander to the lusts of a bunch of lewd, godless young astros. You and I think the Senator's an asshole, but SunCom has to take the nostalgia vote seriously."

"Incredible. So, go on. What about me?"

"They need somebody to test the new facilities.

"What?"

"Some of the die-hards on SunCom are arguing that freefall sex may be dangerous. The others have compromised by agreeing that the new quarters have to be tested before the crew members are allowed to use them."

"Why not let the crew members test them?"

"SunCom wants to record the tests: videotape biometrics, the whole bit. You know how they are. The crews won't go along with it. They want privacy. They're so tense and anxious right now that their first few efforts would probably not be representative anyway. I was asked to do the test because I've experienced freefall and know my way around a sat and because I live in the notorious Giordano Bruno Commune."

"What has the commune got to do with it?"

"Our Saturday night orgies are common knowledge. They figure that somebody used to making it in public should have fewer problems in front of the cameras. They also know that I took our biofeedback erection training and should be able to function normally in a test situation. They asked me to pick a partner, and I said I would ask you."

"Wait. Listen. Let me get this straight. You're asking me to go screw with you in Buckminster IV in front of SunCom cameras and sensors feeding back bio data to my own department? No thanks. I'd feel ridiculous."

"Why? The only observer will be on the sat, running the test. The tapes will be analysed later. You do fine here with people watching." There flashed on his mind the scene of Crystal sitting on top of Kent, her back arched, her long hair hanging free down behind her as she pressed her pelvis against him.

"It's not the same. Then everybody's naked and more or less into it. Some dreggy Sunsat technician staring at us would depress the hell out of me. I'd never be able to come. Unless . . . would they be willing to provide me with hash oil? I could get off on anything then."

"No way. The test has to be under straight conditions or the data won't be any good. But you can pick a technician you'd feel comfortable with. A woman, maybe."

"Is that for me or you? Exhibitionist."

"Well, you're right . . . I'd rather be watched by a woman than a man. You're friends with Caryl Richards. I thought she might do it."

"Listen, I'm not sure I like this. Somehow it smacks of screwing my way into space, like a modern day version of the casting couch."

"I was afraid you'd say that. It is, in a way. But then you are qualified to go into space, and biometrics is your specialty, and once you've been on the mission you'll have had the freefall training, and they can't afford to waste expensive training on somebody who'll go up only once, so you're almost guaranteed a shot at an orbit job."

"You've thought it all out, haven't you? All right, I'll do it, if you can get Caryl."

"Fantastic!" He slipped down beside her and hugged her. "And now let's see what we can do about restoring to its pristine condition Walden

Pond, which you have so thoughtlessly drained."

"Oh, no. Me on top this time."

"OK. But wait until we're in freefall. Then there won't be any top."

* * *

Commissioner Nkala stood up to greet Deryl and Crystal as they came into her office. "Come in, come in. Shuck off your shoes and have a seat."

But they didn't hear her. They were staring at the desk under Nkala's gleaming brown, splayed-out hands, or where the desk must be, though what they saw was a long, deep view into space picked out with stars, a desk-shaped hole you felt you could fall into.

"Oh, sorry." Nkala pressed a button and the desk appeared in its normal smoked-glass form. "I had it on to impress a congressman. Dazzled him right out of forgetting the complaint he'd come in with. It's polarised so I don't see the effect from this angle and I sometimes forget it's on."

Still a little dizzy, Crystal and Deryl flopped into the comforchairs which immediately embraced them.

"You're the folks from GBC, right? I've never really known a spacefreaker to talk to. You look harmless enough."

They cringed.

"Sorry, I should know better. The jargon gets to you."

Deryl squirmed. "I wouldn't be honest if I said it doesn't bother us, but right now we're too interested in getting your briefing to worry much about straight prejudices."

Crystal murmured, "Why is it that she's doing all the apologising but I still feel intimidated?"

"Authority, honey: it's hard to shut off. Let me join you." Nkala came around from behind the desk and plopped down beside them. "That's better. Listen, Crystal and oh, Deryl, is it? You know pretty much the general outlines of the project. I just have to give you some necessary details. You kids can help us solve a really serious problem. Since Sunpower was started five years ago we've had more and more trouble with the crews over the lack of sex. And it's not just their complaints. It really is a problem. Even those that don't complain get edgy, nervous, depressed. Efficiency falls off, accidents happen. We tried shipping up low sex drive individuals but they tended to be either neurotic types or lethargic and sloppy, created more problems than they solved. Several developed a new interest in sex that surprised even them. Commissioner Geiger wanted to try hormones, but everybody knows the side effects of the old birth control pills so well that nobody will touch that approach, even if it could be made legal. All the methods of lowering sex drive had similar problems or worse. Masturbation is pretty constant, few problems except for an occasional excited crewman shooting off in his cabin without using a receptacle and gumming up the air filter, but the crews aren't satisfied; and now there's this new amendment.

"The Nostalgists on the Commission are going along with it grudgingly, but I personally think it's a chance to learn some new things. Any screwing done in space before has been kept secret, so we have to start from scratch to provide the material for a satcrew sex manual. There are definite advantages. Positions uncomfortable or impossible on earth because one body is lying awkwardly on the other will be fine in freefall."

Deryl thought of the time when he was fifteen, romantically letting Alyce Hsu fall asleep in his embrace, thinking later his right arm would be paralysed for life.

"The relative size of partners won't matter much any more, though satcrews tend to be of a size anyway. There will be freer access to all parts of your partner's body.

"Of course, there are problems, too. Most things tend to be harder in freefall; that's why your training has been so athletic. No partner can just lie there and have it done to them. Both will have to be active, all the time. Just staying together will require an effort."

That suited Crystal, who detested the rare men who wanted to romp over her passive body.

"Your vital functions will all be monitored constantly. We don't want any heart attacks. There is one other potential problem we hope we've solved by lining the rec rooms with air-billows: many people don't realise that a good male erection can be broken like a bone if it's bent wrong. It's very painful, and permanent."

Deryl winced and felt his cock trying to retreat up into his groin. How could she talk about this so calmly?

"The padding should prevent problems when you drift into the walls, but remember Crystal, not to whack him with a knee or something when he's hard."

For the first time Crystal considered a man's cock as fragile. It was a strange thought.

"You'll undoubtedly discover things we haven't dreamed of. That's the point of the test. You'll

have a week of acclimatization before the test.

"Oh, I almost forgot. Deryl is free to use his erection stabilizing training during the tests because otherwise we might not get any results at all, but you, Crystal, will have to avoid using your orgasm training beyond what is automatic for you. The crews naturally have avoided sex conditioning and the women won't have your skills right now. Later that can be worked out, but we need to learn as much as possible about your nonfeedback response to help teach the other women. Any questions?"

Crystal glanced at Deryl. "And we both get chances at satcrew assignments after this is over?"

"Nothing can be guaranteed, but I can tell you off the record that both of your chances are very good. Of course, you're going to have the opportunity to discover whether sat life is what you really want." Nkala rose, and looked down at them smiling. "Good luck. Actually, I wish I had this assignment, but I'm too old for acrobatics. I'll be thinking of you." She drew them up by the hands and gave each a warm hug. "And you might be interested in knowing," she added, "that the Commission's attitude toward the Commune has improved markedly now that it's been forced to go to you for help. The old cliche still has a lot of truth in it: 'In diversity there is strength.' "

* * *

Gripping the edges of the rec room port they gently eased their weightless bodies inside. For the past week Deryl and Crystal had discussed in detail the kinds of things they thought would be worth trying. Grinning, but without saying a word, they let themselves drift to the far end of the room and plop softly into the airbillows. With their hands clasped behind them, using slight movements of their legs and feet, they tried to touch lips, but kept drifting past each other. Finally, with a laugh, they seized each other in a tight embrace and kissed long and deep. Somehow the weightlessness made them feel totally absorbed in their kiss, as if their whole bodies were mere extensions of their joined lips and tongues. Crystal felt something brush lightly against her cheek and opened an eye long enough to see Deryl's ponytail floating next to her. He had refused to have a regulation crew cut, but since long hair created very real problems in zero-G, the ponytail had been arrived at as a compromise.

She pulled back her head and stared into his eyes for a long time. Then, gripping his body, she swivelled slowly around so that she was facing his feet and began taking off his footwear and thrusting it in the stowage pouch. They broke apart for a moment, then Deryl, using a move he'd been practicing, pivoted to dive at her waist, nibbling at her navel and working his hands up inside her top to palm her breasts. They felt strange in his hands. They could not sag, of course, as normal breasts do when a woman is standing on earth, nor did they flatten out the way they usually would on a reclining body. They felt very good.

Deryl felt himself drifting away, and quickly flung his arms around Crystal's back, unzipped her top and slipped it off. When he turned to stow it, she dived down behind him to grasp his top zipper. In this way they went on, diving and circling, plucking off pieces of each other's clothing, until they were naked. Crystal let herself float away from Deryl for a moment. She realised that she felt more completely naked than she ever had in her entire life. No part of her body was touching anything outside of herself. She had expected it to feel a little like skinny-dipping, but the sensation was entirely different. In the water your body felt contained, enclosed. Here the airy, open feeling was extraordinary. While she had her eyes shut, savoring the bareness of each area of her body, she felt Daryl suddenly slam into her and the two of them sailed in a laughing tangle into the nearest airbillow. It gave just the right amount to absorb their impact – as it was supposed to – and left them drifting almost motionless beside the wall.

"What are you thinking?" he whispered in her ear.

"I don't think I'm thinking at all, actually, if you know what I mean. Just feeling."

She let herself drift away a few inches and reached out to run her palms down his chest and belly, but her first touch sent him off away from her and she had to pursue him and tackle him like a football player. "Well, that's one of my favorite moves that won't work. In fact, come to think of it, any kind of massage beyond light stroking won't work here."

"You could strap me down so I wouldn't drift away."

"But I still couldn't exert any pressure on you without pushing myself away. Even if we could rig up some kind of harness to allow for massaging each other it would feel terrible, and certainly defeat the whole idea of freefall sex. Let's try something else."

She let her hand trail to his cock, and was surprised to encounter his balls, floating up around it as they never would have on earth. She gently pushed them down, but they bounced against his thighs and came drifting back up again. "Hey, careful! I'm not a pendulum clock."

She laughed, grasped his cock, and began to swivel around to 69 position. "Ow! Stop!" She let go, but grabbed his thighs before she drifted away entirely. "Look, you can't use my cock as a handle. We may not weigh anything here, but we still have mass and what feels like a friendly tug to you can feel to me like you're ripping it out by the roots."

"Sorry," she murmured as she maneuvered along him until she had her arms clasped around his ass, her lips around the head of his cock. She felt his open mouth sink against her vulva and the tongue begin exploring the folds of her labia, strong in and out, up and down, softly, wetly. "Now this," she thought, "is more like it." She was able to adjust her grasp on him so that she could move comfortably up and down his cock, and he was in paradise, burrowing into her vulva, feeling none of the stiff awkwardness that sometimes led to sore neck muscles when he did this on earth.

Together they drifted, heads moving between each other's thighs, enjoying how free and effortless it was.

They were quite unconscious of poor Caryl sitting in the biometrics room, suppressing mounting excitement, waiting impatiently for them to try a new position. So far her instruments showed no undue strain, and since the oral phase had begun, their muscular effort had fallen off markedly, though blood pressure and heart rate were still climbing as the pair continued to stimulate each other.

Back in the room Crystal pulled her mouth off Deryl's erection and laid her head gently against his thigh, giving the side of his shaft an affectionate kiss as she did so. "Ready to go on?"

"Sure. Yab-yum first?"

"Right." He carefully folded himself into a half lotus and she maneuvered to sit into his lap, facing him.

"Crystal to Deryl: docking phase initiated," she giggled.

He laughed, "Stop that. No joking or you'll find no probe waiting for you when you get here."

Their genitals met at not quite the right angle, and Deryl suddenly flashed on Commissioner Nkala's warning about broken penises. He flinched as he realised how easy damage would be, and quickly swiveled his hips to bring himself more in line with her vagina. Finally, he slid inside her smoothly, and they were locked together, her legs clasped around him, his folded under her, their arms embracing each other's bodies tightly. Crystal began rhythmically squeezing her vaginal muscles, massaging his cock. "Hey, how about moving a little? Kegeling is hard with my legs spread this wide." He grasped her under her hips as he would have on earth and pushed gently up, but immediately realised that he would push himself right out of her with this technique. Circling her waist and quickly pulling the two of them back together, he switched to swiveling his pelvis, moving his groin back and forth against hers.

This felt fine as far as his cock was concerned, though the continual push-pull took more energy than on earth where gravity would have done half the job; but with each thrust, he felt their bodies jerk up (out? over?). Crystal kept silent, but she felt as if she were being jacked up. Her whole body felt each thrust. There was no way to resist and absorb the impact without weight or friction. They began moving slowly, jerking, beginning to tumble, finally flopping head first into an airbillow where Crystal felt suddenly, absurdly, as if she were standing on her head. Deryl, startled out of his concentration, stopped. They drifted for a moment, thinking. Then Crystal carefully unfolded her legs from his back and used a hand to push his thigh, signalling him to imitate her. Soon they were in a modified missionary position, her legs spread wide, slightly bent at the knees, he between them, but it felt very different than at home because there was no top or bottom. Deryl's unconscious mind had still not absorbed that fact, and he began pushing away from Crystal with his hips before he remembered that rather than falling back into her when he relaxed as he would under normal conditions, he would come right out of her. Which he did.

His erection started fading fast as his frustration began to mount, but he closed his eyes and began relaxing his tension centers while Crystal stroked his cock gently with her fingers. When he was erect again, he tried once more. As long as he lay still or moved only very slightly against her, everything was fine; but as soon as he began thrusting, the unpleasant jolting of their bodies began again, they started drifting, and inevitably plopped into the airbillows. They were both getting more and more irritated.

Deryl was having a difficult time retaining control over his body. His muscles were beginning to ache.

Crystal began to feel more like an unwieldy package than a woman he was trying to make love to. He tried moving behind her, penetrating her from the rear, but it was no good. His thrusting always destabilized them and sent them tumbling away again.

"Deryl, can't you just not move for a while?"

"Sure, for a while. I could even maintain my erection for a certain length of time while you rub your clit against me, but I can't climb out of the plateau without thrusting and I sure can't come. It looks like freefall is perfect for Tantric yoga. Go ahead and we'll see about me later."

Crystal closed her eyes, grasped him close, and began slowly, then faster, rotating her vulva against him, squeezing his cock, pressing her clit against his pelvis. Deryl could feel her excitement mounting as her muscles became taut and her rhythm speeded, but he felt more and more out of what was happening, a piece of something against which she was masturbating herself. It was a very unpleasant sensation, but he hung on, knowing that she deserved her pleasure after his own efforts had failed so dismally. He was deep in gloom when he suddenly felt her grip him tight and come jolting, shuddering, then collapsing. Whereas on earth she would have collapsed onto him, her loose limbs now let her drift away, eyes shut, savoring the afterglow of her orgasm. He had seldom felt so alone in his entire life.

Finally, she opened her eyes and saw him glaring at her from across the room. She burst into laughter, then immediately checked it and began swimming toward him. "I'm sorry, you just looked so funny upside down. Or maybe I was upside down. Anyway, I am sorry. I didn't mean to hurt your feelings."

He closed his eyes, fiercely trying to fight down his anger, knowing it was not her fault, that if he let himself speak he would just say something stupid, hurtful, make the situation worse. He gained enough control of himself to start his relaxation response and felt his muscles begin to unknit and lie loose throughout his body. He felt a hand flat against his belly and another against his back, and a mouth nibbling on his soft, drifting cock. He now sank into passivity while she licked, kissed, and mouthed him back into arousal. Crystal was very good at oral sex, and she put her whole self into it. Swiftly and smoothly he felt the curve of his excitement mount, and was grateful that she seemed to know without saying anything that now was not the time for a slow teasing approach. She moved him firmly, warmly toward orgasm.

And then he came. He knew that the spurt of semen would not have enough mass to provide any significant rocket effect, especially as she continued to hold the base of his cock with one hand while he came against the roof of her mouth, but the violent movements of his hips jerked him out of her grasp and sent him tumbling across the room, slamming into the airbillows with greater force than ever before, his half-finished orgasm spurting into the void, all the feeling in his cock abruptly cut off except for the pain caused by jerking out of Crystal's grip. He rolled quickly into a fetal ball and spun slowly over and over, clutching his knees tightly against his chest and crying softly with the pain of his throat, tied in knots.

Crystal drifted slowly over to him and placed a sympathetic hand on his shoulder. "Can I help?"

"Please Crystal. I'm so wretched I can't think. Just leave me alone for a while." Slowly he regained control of himself and began plunging down through relaxation levels toward the dark, warm bottom: sleep.

* * *

When he awoke two hours later he felt much more relaxed, refreshed. But he was rather startled to find himself strapped to the technician's chair in the biometrics room. He was alone. They must have moved him here while he slept. Where were they? The video monitor had automatically turned off when the console had run out of tape. He leaned forward and flipped it on, but it took a few moments for his sluggish brain to absorb what he saw on the screen. Crystal and Caryl Richards were sleeping clasped loosely together, heads floating gently beside each other's bellies, and their faces expressed a sublime tranquility: absolute bliss. They were both naked.

Quickly he grabbed for the video console, ran the tape back about an hour's worth, and turned it on.

The picture now appearing on the monitor showed Caryl and Crystal floating side by side, reaching out their hands to gently brush each other's flanks and breasts, smiling. Smiling. Serene. Beautiful. He felt like crying again.

A kind of excitement fought against the sinking feeling in the pit of his stomach, and he sped the tape ahead fifteen minutes' worth only to find them in more or less the same position, still gently trailing fingers, lips, tongues, nipples against each others' bodies and smiling. He knew in theory that women together often enjoyed very long, slow,

gentle lovemaking, but when he had been with women making it before, their style had been more like the average man's. It came to him with a sickening impact that this particular variety of lovemaking could probably only be enjoyed in the absence of men.

He summoned up all the sympathy he could for them and resolved to watch patiently and see the rest. With what seemed to him incredible slowness they continued to carefully explore every inch of each other's bodies, only occasionally brushing the back of a hand or a cheek against the soft pubic hair. Gradually these fleeting touches came more often, and then they were floating face to face, mouth to mouth, one arm hooked around the other's back, the other palm out, massaging the vulva and clitoris. Deryl knew from experience how stiff and awkward that twisting of the hand could be, but he saw that without gravity nothing could be easier; the bodies did not crush the hands between them; nothing could be simpler, more effortless. The movements of their hands reminded him of the swaying of seaweed underwater.

They began to clutch each other tighter. He saw the little beads of sweat pearling along Crystal's hairline, caught an occasional glimpse of the glistening hair under her left armpit. "And the sweat won't trickle down her side," he thought distractedly.

The intensity and rapidity of their movements increased, but their flashing, blurring hands were the only moving parts of this warm radiating composite female. The overwhelming mass of the rest of their flesh kept them almost perfectly stable, without effort, without strain. Suddenly, she came, they came, shuddering, heads whipping back and forth, legs braced against the air, feet grasping like hands, finally in motion, drifting off across the room, but at a leisurely rate which allowed them to thrash out their orgasms and come to rest with an ecstatic sigh against the yielding surface of the airbillows.

After a few minutes of rest, they began again. Caryl slowly swung around and kissed Crystal's vulva as if it were a mouth, smiled, and then settled down to tonguing and sucking the soft, warm tissues in front of her. Crystal lowered her mouth to Caryl, and they had begun again. As Deryl watched, depression began to seep in and chill his excitement. And then, as the full meaning of what he saw before him sank in, he groaned.

* * *

Crystal hesitantly pushed open the swinging door of the Giordano Bruno Commune's kitchen. Deryl was standing with his back to her, violently assaulting a large lump of pumpernickel dough with an energy which seemed to have more to do with his inner feelings than with the kneading requirement of the recipe.

Crystal stood quietly beside him for a moment. "Hi."

He turned his head, startled. "Crystal! I didn't think I'd see you again!"

"I couldn't leave without saying goodbye. I finished training yesterday and we leave in the morning for my first duty tour on Buckminster IV. I didn't know if I should come or not."

He put his arms around her and pressed his cheek against her hair, sadly. "Of course you should. I'm not mad at you. It's not your fault."

"I didn't mean anything when I talked Caryl into trying it. It was just for fun. I didn't know SunCom would decide that women were the only ones suited for freefall sex. The union is going to take it to court."

Deryl shook his head. "They don't have a chance. The Supreme Court has always interpreted the ERA to mean that genuine biological differences between the sexes can be grounds for certain kinds of discrimination. There haven't been many cases, but this is going to be one of them. It isn't just SunCom or the courts. I saw it myself when I watched that tape. Anybody could see what the difference between the two sessions meant."

"I'm sorry. At least you can still run the shuttle, and in a few years there'll be Moonbase. And some day the factory stations will be big enough to be given a gravity spin. You still have a chance for long term space duty."

"I may be too old by then. No, I've got to face the facts: some jobs just aren't suited for men. SunCom is already rubbing its hands over how much they're going to save in operating expenses because you women are smaller and consume less."

She gave him a quick hug and a peck on the nose, put her lips against his ear and whispered, "Your bed free tonight?"

He looked at her, then smiled a little sadly. "Sure. I think I'm over the trauma now. For old time's sake." And kissed her back.

"See you later." She headed toward the door, then paused, turned around, and raised a finger rhetorically in the air. "Woman's sphere," she said, "is in orbit." His laugh didn't hurt as much as he thought it would. ■

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THE DAMNED SOUL

WHAT "MEANINGFUL" WORK MEANS

by Richard Hall

I FINALLY CAUGHT UP with Seth at Cloud Seven He didn't look caught up with – in fact he saw me first, and waved. Evidently he had forgotten all about my little favor.

"Little favor, eh?" He ordered a bottle of the house zinfandel and we moved to a table by the mirror. He was getting fat enough that his vanity was slightly repulsive. "Do you know what a little favor like that costs? Five drudges." His tone was indignant. "When those five were probably women . . ."

"Are we talking about the same thing?"

"Your friend, Edward. You want a meaningful job for him."

"Right, so what's all this about five women?"

"Drudges," he said.

Just then the wine arrived. Seth poured, and took up his glass. "To meaning."

I refused to be baited. "So how about it? Your organization could always use another trouble-shooter or estimator."

"Did I ever tell you about my career as a problem solver?"

He took my silence for encouragement.

"When I first came to town, I went to work for a professional problem solver. We were in one of those little bubbles of economic optimism just then; it wasn't so crazy as it sounds now.

"Actually she did pretty well. Jean was on to nonprofit organizations, with their bottomless problems and pockets. She could solve any problem with a government grant, of which she got a finder's percentage. She also wrote proposals and administered programs. Jean already had

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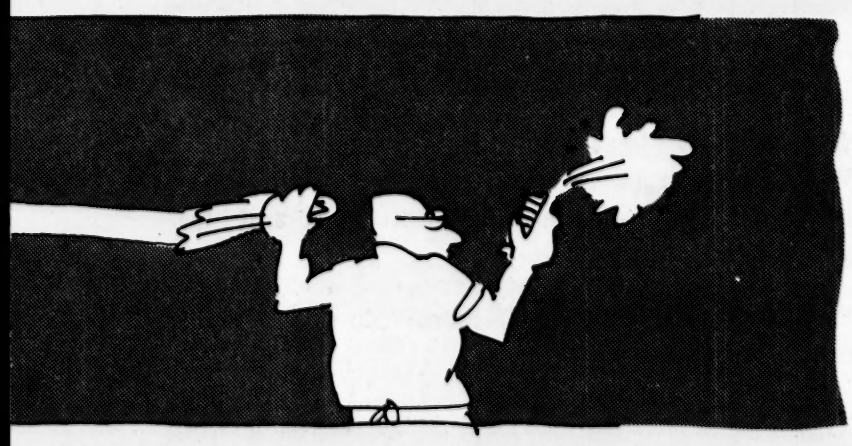
–Anne Herbert

two flunkeys, thank God, so I signed on at salary plus – number two problem solver – I only typed for myself. Our relationship was nearly perfect: leisure was my idea of status; Jean favored consumption. We agreed like Jack and Jean Sprat. I would be there yet if she hadn't conceived a mad desire for a word processor.

"We quarreled about this machine for weeks. Not only did its name offend me, but it cost as much as a healthy secretary. I needed a secretary. Jean said I could have one of the typists when the word processor freed them for other work, but you know whether or not that ever happened. In the end, Jean overruled me and bought this trinket with company funds, which I was inclined to regard as partly mine. Even so, I could have lived with it if it hadn't impinged upon my leisure.

"The blowup came late one night or rather early one morning when I stayed after hours with our shiny new word processor to make some corrections in a report (problem paper we called it) for one of our clients. We couldn't afford to pay a typist overtime just then, thanks to our investment in gadgets.

This problem paper promised to recoup a good part of that investment, too: it was for a catering collective which because of its problem was on the ropes. We did their study almost gratis. Up until the year before, they had enjoyed a phenomenal growth but then in the space of a quarter had gone as spectacularly into the red. It wasn't hard to see the coincidence of this reverse with the hiring of their first employee.



GARY HALLGREN

There is, I believe, a passage in Marx: "The longer, more painful and more disgusting the work, the less it pays." The inverse is equally true.

"On the face of it, there was nothing unreasonable about hiring more people. For a couple of years the original four members of this collective had flourished as a sort of informal partnership. Because they could cook and were reliable, big jobs were sometimes offered them but they had to turn down anything too big for the four of them unaided. Obviously it was time to expand. They added another four members to the collective. When one of the new members took a fall and filed for workmen's compensation, they found that they were employers.

"The ensuing paperwork demoralized them sadly for a month but at last they hired a new member, making sure she knew how to fill out papers. All of this was quite a drain on their finances, but bigger jobs were paying better and their situation wasn't desperate yet.

"Then they ceased being so popular. True to their vaguely collectivist ideas, they'd shared all the creative jobs, including the cook's, with their new employees.

"One of these new members however, who had been a malcontent headwaiter, proved something of an advertising genius. Their trade increased again, but with it their costs because they now had a full-time PR man.

"The second, seeing how his comrade throve, seized the range. He had no talent for cooking or anything else, and as such people seem to do, he singlemindedly schemed to keep himself always in some artistic job. Additionally, he was a militant vegetarian.

"The third became an ideologue.

"The fourth was so busy with paperwork that she couldn't help in the kitchen at all, so she became perhaps most discontented of the lot because she had left her former employment to do something INTERESTING for a change.

"The original four couldn't carry that much dead weight, so one became a buyer, one a decorator, one a wheeler-dealer, and one a paranoiac. Then they began to have meetings, criticism sessions in fact, once a week lasting an entire day. Someone was always calling sick, often as many as three at a time. They had quit functioning. At that point they came to us.

"I was our alternatives specialist, so this was my baby. The problem paper was running true to form. Their problem, in my phrase was '. . . a blockage of communications resultant in part from role ambiguities and unrealistic role expectations, together with the lack of a clearly delineated and well developed program of initiation of additional members into the objectives and pro-

cessess of collective work and responsibility.' We would get them funding to hire a counselor from the Center for Progressive Management to '. . . develop and implement a program of collective growth and realization.'

"It seemed too simple on first reading, so I added half a dozen 'develop's to the paper and threw in a few 'alternative's, and an 'appropriate,' and even a 'whole person.'

"Then the word processor typed me a fresh draft.

"Next I deleted a passage that was triply redundant and tacked it on near the end. Then I rearranged the opening paragraph so that the sentence order followed my outline more closely. Then the machine typed me another draft. It typed at least five times as fast as a secretary.

"Then I read through the entire dreary document and found a dozen spelling and punctuation errors and several stylistic awkwardnesses. I mended them and then had it type me another draft.

"This time I saw that too many paragraphs straddled pages. Although the thing was programmed not to put a single line on the next page, it had sometimes put two. I deleted a line here and there to make the paper look better, and put several of those lines together in one place to make a paragraph go five lines on a following page. Then I had it type me a fresh draft.

"Now I realized that I had used too many 'the's in a place or two, so I changed some to 'a's, some to 'this's, and some I deleted altogethers. Then I had it type me a new draft.

"While that was being done, I poured myself a bourbon and bourbon, and reflected that I needed a machine to do my job for me. One could, I supposed, get a grant to 'develop and prototype a . . .' but in fact it already existed; dating from the late machine age, it was called a manure spreader.

"Come to think of it, our caterers could have used a little technology too: what they really needed was an enormous food processor to do their work for them while they all played meaningful . . . (BLIP, the thing said, and I had my perfect copy) . . . or several drudges! Of course. What they really needed, what their behavior assumed and their ideology denied, was a class of chattels. For the first time I understood what 'meaningful' means.

"There is, I believe, a passage in Marx: 'The longer, more painful and more disgusting the work, the less it pays.' The inverse is equally true: The more abstract, stimulating and creative the work, the better it pays. The two propositions are related in rather an unpleasant way. 'Meaningful' is really no more than a bourgeois euphemism for 'privileged.'

"We pretend that fulfillment occurs in a political vacuum, and yet who else invented freedom but slaveholding Greeks? What else is meant by the distinction between staff and professional but that one types and the other goes to conferences? What else was Ti-Grace Atkinson getting at in her resignation from . . ."

"Now wait a minute," I interrupted. "Who or what is Ti-Grace Atkinson?" It seemed to me that he was getting altogether too obscure.

Seth ignored the question. "I realized," he said, "that it is impossible to change the world. Any number of people are securely in meaningful positions and mean to stay there.. Just ask T . . . . Well anyway I saw the futility of trying to do away with fulfillment.

"I typed my resignation on the word processor. It took fourteen drafts, but it was a masterpiece. I had saved enough by then to capitalize a small catering business. It wasn't hard to hire away the three best cooks. I left the bookkeeper behind; she had already shown an alarming will to meaningfulness. My employees were the happiest in the business. I never let creativity raise its ugly head."

"You mean to say, in short, that a meaningful life is impossible?"

"No, only that whoever would make his life meaningful had better first buy a whip – to paraphrase Zarathustra."

"So after all that, what's he supposed to do?"

"Hm? Oh yes, Edward. He should see the immorality of meaningful employment and then either seize it boldly or abstain from it and . . ."

"Starve?"

"The State of California doesn't allow that. Anyway, what's to keep him from going back to Walker or wherever it was? I'm sure his family could arrange him something comfortable and properly meaningful."

"What? And live among farmers? No books, no music, no . . ."

"What good is culture anyway to a mind so distracted? His problems are purely imaginary, and yet he's as miserable as if meaning were the forbidden fruit."

"Imaginary! He can just walk away from being without a future, I suppose."

"He wouldn't have to walk far, in a town so blessed with bridges."

"That's an ugly, irresponsible thing to say."

"*Chacun a son gout.* He can type, I trust?" ■

The Amy Vanderbilt Complete Book of Etiquette

I used to think that to have manners was to be mannered; that etiquette was affectation. Now I see that discipline of any sort is a lot more comfortable than its absence, and that is quite as true of consideration for others as it is of daily exercise or meditation. Comfortable, yes; effortless, no. There's inborn grace and learned grace, and in a world of constant change and conflict, what's inborn may soon be eroded.

Once upon a time I met a beautiful Pole who looked like Snow White in a fine old volume of fairy tales. She had been a teenager in Warsaw during World War II. I asked her how she and her family had survived its horrors. One thing they did, she told me, was to set the table with good linen, crystal, and silver in order to dine in a civilized way on their one meal per day of black bread and ersatz coffee. It was for them a way of asserting some gentility in a situation that threatened to reduce everyone to savagery. That well-set table in Warsaw was a concrete expression of hope for grace to return to the larger world.

In the **Complete Book of Etiquette**, *you will learn how to set your own gallant table and a lot more besides. There are millions of how-to books these days, but Amy and Tish have written the one that really could enable you to be a gracious, thoughtful, collected soul. To achieve this miraculous result, you work from the outside in — no enlightenment necessary. As Anne Herbert says, "Behavior counts."*

All you have to do is follow a few hundred simple suggestions. The essence of all of them is consideration for others, whether that is manifest as conversational tact, promptness in thanking people, being organized enough not to confound everybody else, or making a proper introduction.

The **Complete Etiquette** *is like an aunt (or two) in a book: perfect aunts — upright, knowledgeable, mindful and generous, with a comprehensive understanding of life's ordinary and extraordinary moments and an endless supply of advice for making those moments as comfortable as possible.*

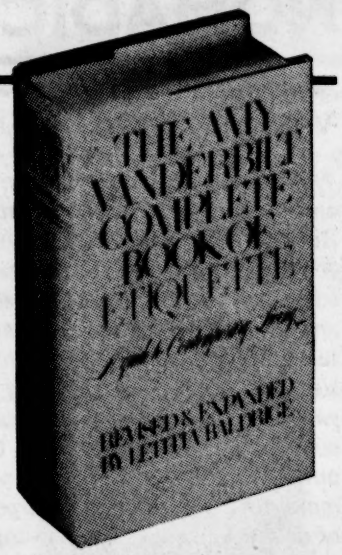
As you would expect, they offer quite a bit of information about weddings, christenings, debuts, and weekends in country houses. Bourgeois and superfluous as such things once may have seemed, my quickly aging generation is marrying, reproducing, and prospering evermore, and I need to know how to participate in those events correctly. Richard the haircutter consoled me about this creeping respectability: "If you're not a rebel at twenty," he said, "you have no heart, and if you're not bourgeois by forty, you have no brains."

Whether you're bourgeois or couth Bohemian, you may find helpful, and basic, the **Complete Etiquette**'*s information on writing letters of condolence, bedmaking, driving politely, and bringing up baby to be courteous. If not too useful, certainly interesting are the instructions on how to get an audience with the Pope, the table of proper forms of address, suggested "Gifts for a Nun," a birdwatcher's guide to military insignia, and what to do about the press when someone in your family has been arrested for manslaughter. The point of all the information, commonplace and esoteric, says aunt Tish, "is to help people make it through life just a little more easily and be a little more sure of themselves."*

Est training costs hundreds of dollars and the **Etiquette** *only $12.95. And you can always shut the book. However, because it's so effective, you probably won't. I can't. I find it changing me in subtle ways. Damn fine book; makes me want to behave.* —*Stephanie Mills*

[Suggested by Edith G. Mills]

The Amy Vanderbilt Complete Book of Etiquette
(A Guide to Contemporary Living)
Amy Vanderbilt and Letitia Baldrige
1978; 879 pp.
Thumb-indexed Edition
$12.95 postpaid from:
Doubleday and Company
501 Franklin Avenue
Garden City, NY 11530
or Whole Earth Household Store



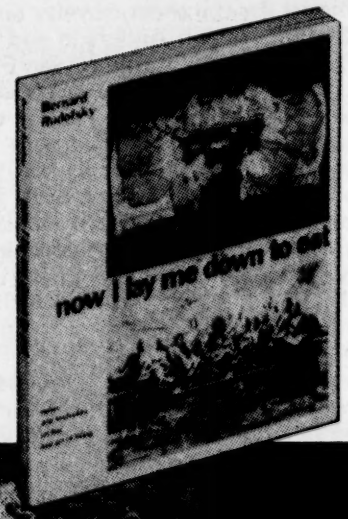
Pickles, Radishes, and Celery Whole pickles are taken up with the fingers, as are radishes; sliced or very small pickles are eaten with a fork. When a relish tray is passed to you, never take anything from the tray directly into your mouth. Always put it first on your butter plate, or on the side of the plate under your appetizer server, and then into your mouth.

Now I Lay Me Down to Eat

American culture seems to be entering a period of paralyzing squareness in which I must admit I somewhat rejoice, because it frees my own counter-pendulum from demonstrating citizenship and responsibility to swing more the other way in my spare time. With hipness gone, bohemianism in all its individual strangeness can return.

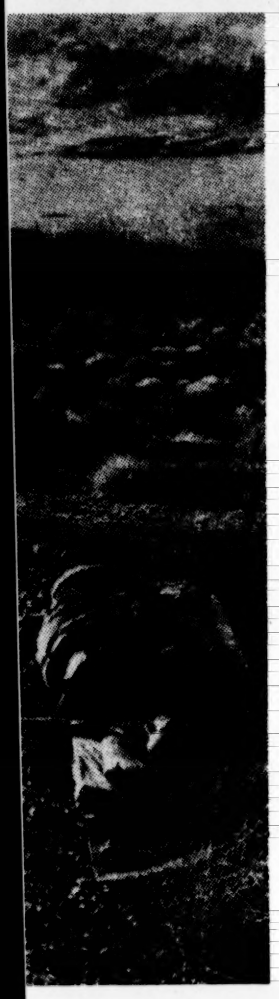
Bohemians have ever mined the behavior of other times and cultures for ideas (as the hot tub was lifted from the Japanese by southern California spare time outlaws in the '50s). Mine this book of "notes and footnotes on the lost art of living." Author Bernard Rudofsky has changed our culture before, with **Architecture Without Architects** *(NWEC p. 211).* —*SB*

Now I Lay Me Down to Eat
(Notes and Footnotes on the Lost Art of Living)
Bernard Rudofsky
1980; 191 pp.
$10.95 postpaid from:
Doubleday and Company
501 Franklin Avenue
Garden City, NY 11530
or Whole Earth Household Store



Despite the scabby complexion of the semi-restored architecture, this dining room comes much closer to conveying the setting of the Last Supper than most ecclesiastical paintings. The masonry couches were covered with layers of mattresses, while pillows of various shapes helped to prop up the diners. Outdoor dining room in the House of Caro at Pompeii.

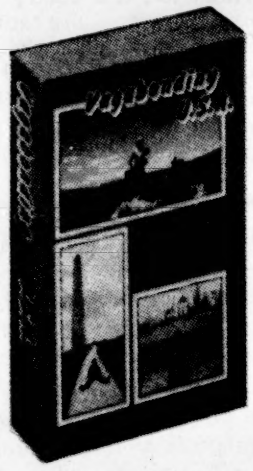
NOMADICS



Vagabonding in the U.S.A.

This is a thoroughly rewritten, technically expanded, and personally evolved update of **Vagabonding in America**, *Buryn's encyclopedic 1973 head guide to low-cost touring. It's a recommendation in itself to say this new version somehow retains and even extends the enormous energy and enthusiasm of that earlier trip. Hitching, hiking, bicycling, motorcycling, car camping, canoeing, eating, sleeping, doping, befriending, working, and staying in whatever United State, mental or geographical, that currently holds your fancy. Good info-packed section on the U.S.A from a foreign visitor's viewpoint. The remainder of the book is largely on how and why the rest of us might adopt nonstop low-profile touring of our homeland as an enlightened lifestyle.* —*Lewis Watson*

Vagabonding in the U.S.A.
(A Guide for Independent Travelers and Foreign Visitors)
Ed Buryn
1980; 428 pp.
$10.81 postpaid from:
And/Or Press
P.O. Box 2246
Berkeley, CA 94702
or Whole Earth Household Store



- If you don't know where you're going, you're there.
—Anonymous

- See America by car, if you can. Don't bring your own car; simply buy one here, preferably a bulbous American model for the sheer novelty and comfort of it. Take the example of Jan Anderson and Anna Bixell, a touring Swedish couple I met in San Francisco in 1978. They bought a 1970 Chevrolet Impala sedan in Virginia (on the east coast) for $837. The car dealer helped them arrange for three months of insurance (third-party liability, no collision coverage) for an additional $83. When they arrived in San Francisco after a few months and thousands of miles, they sold the car by means of a newspaper advertisement, using a pay telephone at which they waited during hours specified in the ad. They easily sold the car for $800. Its cost to them was thus just $120, in exchange for which they had unlimited freedom of movement during their entire stay. This is a typical example, and one you can easily emulate. Often you can negotiate with a car dealer to sell the car back to him for a specified price after a specified period.

- One reader wrote to tell me he was planning to hitchhike all over the U.S.A. using a CB radio to get rides. Although I haven't heard from him since, I'm sure his idea would work some or all of the time. Of the 40 assigned CB channels, channel 19 is the trucker's channel and the one to stay tuned to. You'll get information about what's happening on the road: traffic, accidents, hazards, police whereabouts, tips on good places to eat or stay.

- Carnies almost always have some openings, because job turnover is high. Many casual workers stay only a few days, or for a few dates in different towns, and then move on. There are no qualifications other than looking reasonably tidy, washed, shaved, and sober. . . .

To get a job, stroll onto the lot and ask anyone about work possibilities or find the trailer where the carnie boss hangs out. If you get a job, expect to work hard: often it's 12 to 14 hours a day, seven days a week. The pay isn't great, but it's strictly cash-and-carry, with little or no concern for such niceties as social-security numbers, real names, or taxes.

Early Winters

If your taste in outdoor gear trends toward the definitively nifty, this place has the latest in flashlights, clothing, camera stuff, etc., etc. And only the latest. —*SB*

Early Winters
Catalog
free from:
Early Winters
110 Prefontaine
Place South
Seattle, WA 98104

↓
If the MoonLight's 4-oz. weight, unbreakable strength, and convenient features aren't enough to make you pick up a pencil and order yours now, consider this: The MoonLight runs on a lithium energy cell, the most powerful battery there is. A single lithium cell replaces 2 conventional batteries and gives 12-15 hours of light!
MoonLight + Lithium Energy Cell and 4 bulbs
No. 5700. . . . . $19.95

↓
Our Hungarian Sunday Stove weighs just 5½ ozs. It folds to fit easily in your parka or pack pocket . . . so you can take it anywhere to cook up snacks, hot drinks, and meals in a jiffy! $9.95

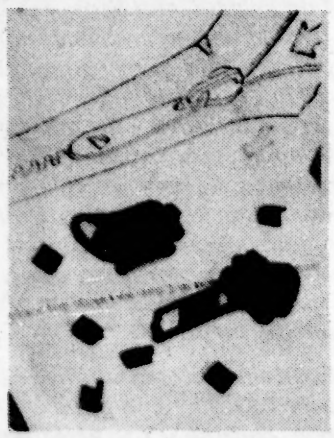
Frostline Fabric Line

Home sewers and campers will be interested in this company. Prices are high, but they do supply items impossible to find elsewhere, such as two-way separating zippers, velcro, bulk goose down, and ripstop nylon by the yard. —*Paula McKeown*

Frostline Fabric Line
Catalog
free

Fabric samples
$2
both from:
Frostline Fabric Line
Frostline Circle
Denver, CO 80241

→
Zipper Repair Kit
Square head and round zipper pulls, each 1-1/8" long.
Price: $1 each.



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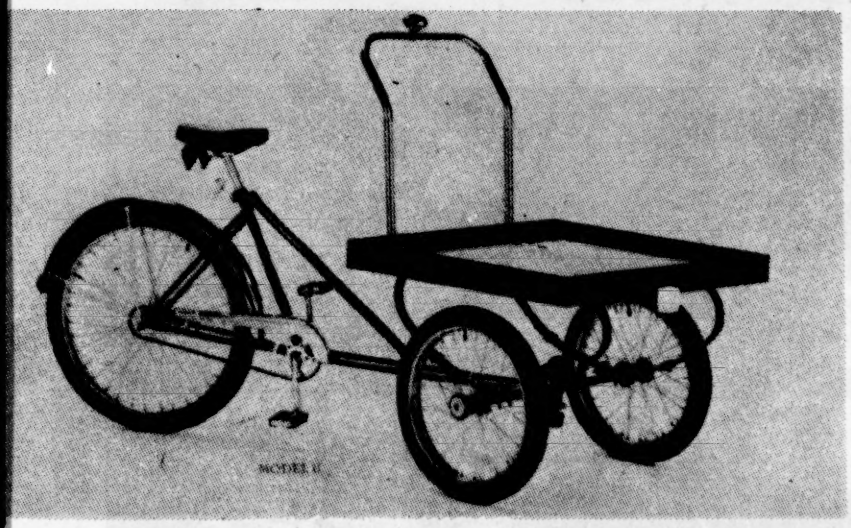
Leather Handles
3-3/4" square genuine leather handles with two sturdy snaps. Color: Brown (1). Price: $2.50

Worksman Cycles

You need a tandem tricycle with a pickup bed on the back, puncture-proof tires, drum brakes like a car, and a foot operated 3-speed tranny? Or maybe a Good Humor trike with a cold box up front? Or a bike your kids won't be able to break? How about a nice factory trike-truck? You can have it with the load in front or back. You can order it as a folding model. I've seen all these machines, and can vouch that they do build them like they used to. If heavy duty pedal power is your need, these folks probably make something that'll do the deed. They've been doing that since 1898. —J. Baldwin

Worksman Cycles
Catalog
$.50 from:

Worksman Cycles
94-15 100th Street
Ozone Park, NY 11416

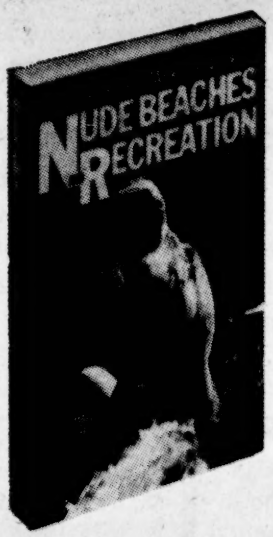


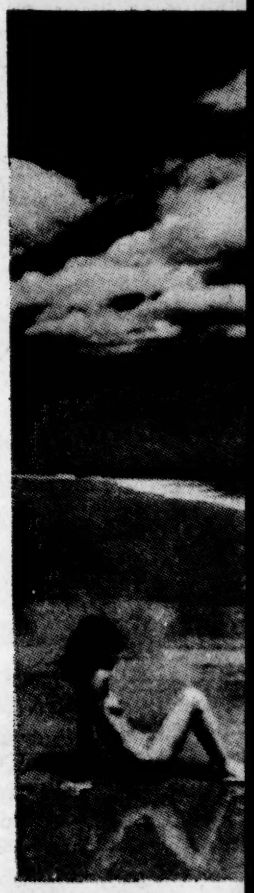
The utility tricycle

World Guide to Nude Beaches and Recreation

Well annotated, surprisingly comprehensive, with nice color pix of the scenery on and around the hundreds of sites. —SB

World Guide to Nude Beaches and Recreation
Lee Baxandall
1980; 214 pp.
$10.95 postpaid from:
Stonehill Books
1140 Avenue of the Americas
New York, NY 10036
or Whole Earth
Household Store





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CANARY ISLANDS

Gran Canaria

Gran Canaria's nude sands are located at Maspalomas, just 35 miles from Las Palmas. Though the dune area used for sunning is patroled by police on camels from time to time — and nudity here is theoretically illegal — it is an extremely popular spot.

Directions: From Calle Triana in the center of Las Paas, take the Pirata minibus. Disembark after about an hour when you see a lighthouse. Turn left and walk along the stretch of beach until you come to a tributary stream flowing into the sea. At this point, turn inland at an angle of about 45 degrees and walk straight to the dunes (about 30 minutes).

Fat Tire Flyer

The balloon-tired bicycle mini-craze has spun out its own tiny and witty magazine, which some rapid readers are callously mispronouncing as the Flat Tire Flyer. Oh well. It is for now mostly news of races and rides all over California, and increasingly, other western states. It also looks like it may become a forum for dealing with access problems to choice off-road trails by encouraging biker responsibility for things like trail maintenance.
—Richard Nilsen
[Suggested by Walt Radtke]

Fat Tire Flyer
$2 (5 issues)

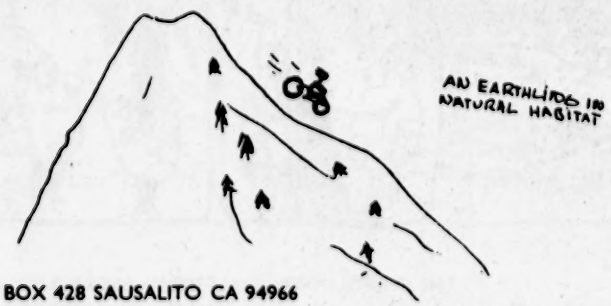
from:
Fat Tire Flyer
P.O. Box 757
Fairfax, CA 94930

●

For those long on stamina and perhaps short on brains, the second annual Roughneck Challenge will cover 115 miles of grueling off road intensity in two days. The two-stage event will start at New Cuyama (on highway 166, one mile up Paradise road). Stage one will be 65 miles on a rough fire road and will feature 7000 vertical feet of climbing.

Stage two is 50 miles, also with 7000 feet of climbing.

Riders will be required to carry their own water, camping gear, and tools.



BOX 428 SAUSALITO CA 94966

Burger King boogie

Some of my favorite jobs have been in fast food restaurants. That's where my mind is free to grow intellectually, while my hands labor.

If you like to travel, as I do, you can pick up a job in one anywhere in the country — allowing you to study the regional mores. It's good for the staff too. After all, it's not every day they find someone as interesting as you filling the cole slaw!

Kentucky Fried Chicken "cooks" in ways other than you might think. Here people of all different ages rub elbows at menial tasks. Being physically juxtaposed forces people to face each other and eventually . . . talk. McDonald's is a wonderful place to get a perspective of oneself in relation to other generations. For example, I've found that initially, my presence bothers the many high school students who work there. It seems to upset them to be slinging hash with a former school teacher. After all, the only reason they're working there is to get the tuition for college to become professionals themselves; When confronted by them I always have plenty of explaining to do. In essence I confess that after a few years in academic life it's "soul cleansing" to work at a physical job. Not to mention the good exercise. They end up liking me, which is a lucky thing because, believe me, it's the Archies and Veronicas who can make or break you in a job like that.

Aside from the financial reward it's a place where a traveller, away from home, can find an "on the spot" family.

There's piped music for dancing in the kitchen.

Also you can eat all you want and sneak a chicken liver home for your cat!

Mia Elizabeth Kangas
Madison, Connecticut

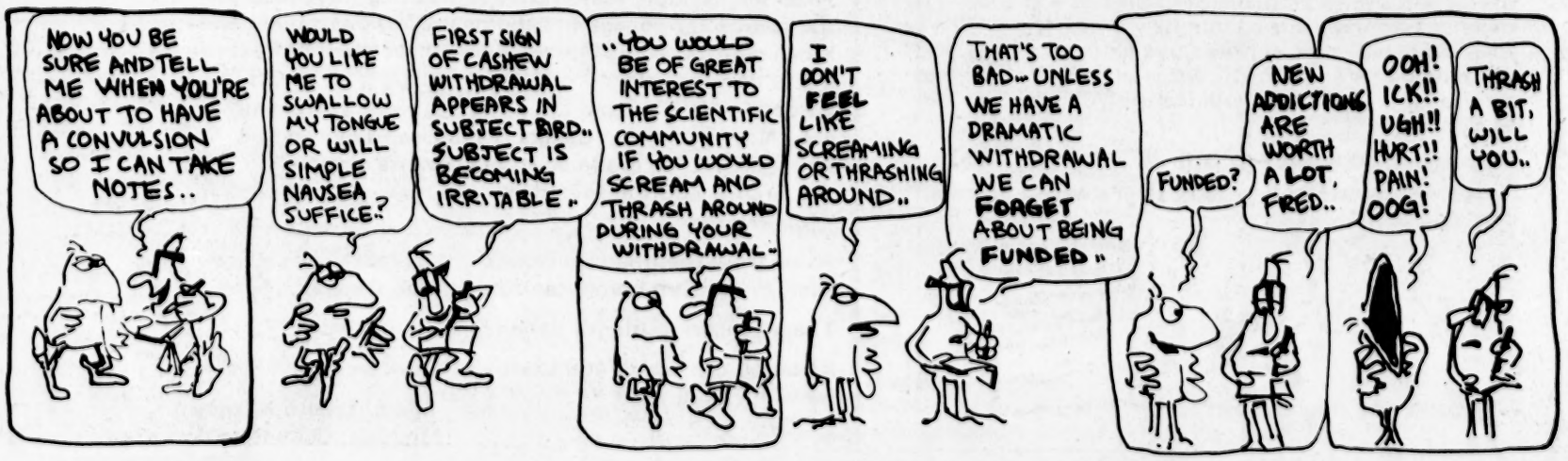
Odds and Ends from Dan O'Neill

Readers left hanging by cartoonist O'Neill's suspenseful non-conclusion to last issue's strip will have to dangle a bit longer. It was a tangled drama, involving the two Red★Star detectives Fred and Hugh in deadly combat with the pygmy sasquatch "Littlefoot." Other developments included the return of WERECHICKEN and the sequestering of 2000 stolen Petaluma chickens in the Washoe Sink, a detail which some readers forgot, which led to Artistic Snit No. 47, a walkout by the cartoonist, and a Tinkerbell-style plea to the reader to buy more **CQ** *subscriptions or never learn what happened next.*

Well. Some of you did buy subscriptions. O'Neill's snit was not real — only a sneaky way to end his four pages in mid-drama. What is real is his contrition at not being able to continue it just now and his promise to do so next time. He has a good excuse — taking over editorship of the Nevada County **Independent** *(details in "Gossip" on p. 143).*

Here are a couple other Odd Bodkins bits and, oboy, suppressed cartoons from O'Neill's regular feature in the Sunday San Francisco **Chronicle**. *The cow cartoon got axed lest a touchy Hindu take offense. As for the Irish one, who knows?*

—SB



O'NEILL

"CODE OF THE WEST"

"IT WAS UP IN MONTANA.. BACK IN 1881.. A CERTAIN ALOYSIUS O'LEARY WAS DETAINED BY A POSSE INTERESTED IN A COW..

..THE COW WAS WITH ALOYSIUS AT THE TIME..

AT THE TRIAL, ALOYSIUS CONVINCED THE JURY THAT **EVEN THOUGH** THE COW HAD SOMEONE ELSE'S BRAND, THIS WAS **NOT** A CASE OF RUSTLING.. NO.. THIS WAS A **RELIGIOUS** DISPUTE..

ALOYSIUS HAD RECENTLY CONVERTED.. HE WAS NOW A **HINDU**.. AND HE HAD JUST RECENTLY DISCOVERED THIS COW TO BE HIS GRANDMOTHER..

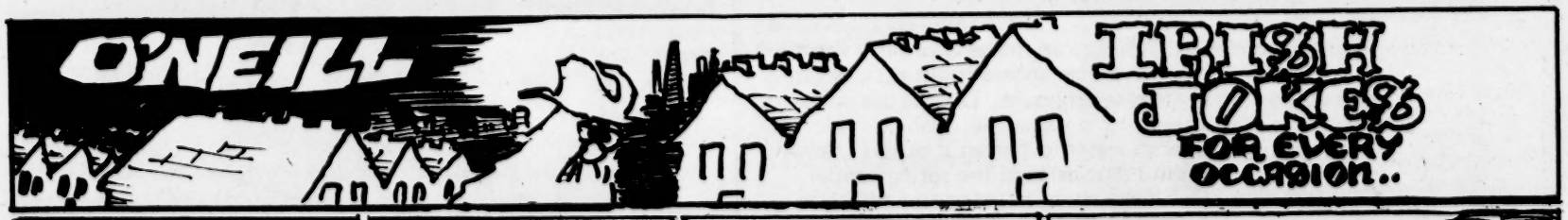
*.. WELL .. THERE IT WAS.. *
THE CONSTITUTION SAYS WE HAVE FREEDOM OF RELIGION.. IF YOU WANT TO BE A HINDU.. GO AHEAD.. SO ALOYSIUS "VISHNU" O'LEARY TOOK GRANNY HOME.. CASE DISMISSED..

HOWEVER.. A FEW MONTHS LATER, A NEIGHBOR NOTICED GRANNY WAS MISSING.. STRANGE BONES IN THE STEWPOT.. ALOYSIUS "VISHNU" O'LEARY WAS CONVICTED OF 1ST DEGREE MURDER.. ALOYSIUS WAS SUSPENDED FROM A BEAM AND FOLKS SHOT AT HIS SHOES..

* — MORAL — *
DON'T HAVE GRANNY OVER FOR DINNER IN MONTANA..

©ONEILL 81

O'NEILL



IRISH JOKES FOR EVERY OCCASION..

..HOW ABOUT THIS..? IF IT WASN'T FOR THE WHEELBARROW, THE IRISH WOULD NOT HAVE LEARNED TO WALK..

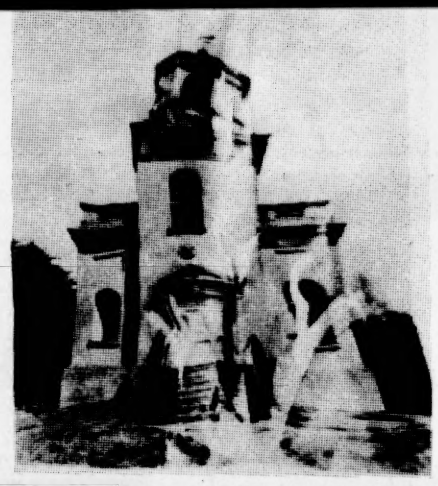
..OR THIS ONE..? ..THE ONLY WAY TO KILL AN IRISHMAN IS CUT HIS HEAD OFF AND HIDE IT FROM HIM.. THAT ONE CRACKED ME UP!!

THE BAD NEWS: THE ENGLISH HAVE LANDED ON THE MOON... THE GOOD NEWS: ..ALL OF THEM..

THESE SMALL WITTICISMS ARE PROVIDED TO AID YOU IN CONVERSATION ABOUT THE IRISH.. BOBBY SANDS, MEMBER OF PARLIAMENT IS DEAD.. IRELAND IS COMING APART AT THE SEAMS.. ..AS AN AMERICAN I HAVE DIFFICULTY UNDERSTANDING THE HUNGER STRIKE..

I SIMPLY CANNOT IMAGINE MY CONGRESSMAN STARVING TO DEATH..

BOX 428 SAUSALITO CA 94966

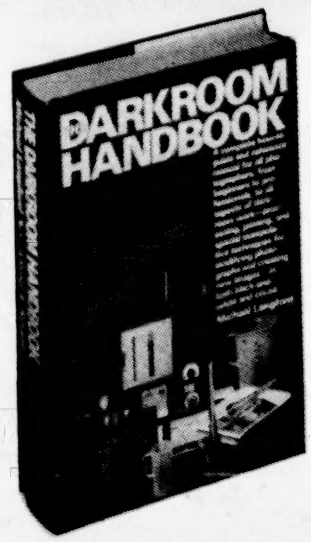


Giving a photograph a collapsed look by crumpling the paper.

The Darkroom Handbook

A worthy companion to **The Photographer's Handbook** *(***NWEC** *p. 485). There's a good deal of messing around with images in photography these days. Here's how — wide choice, detailed technique, graphically presented since everyone knows photographers can't read.*

(Personally I think that making photographs lie, and making people learn to disbelieve them is destructive, greedy, stupid, and on rare occasion very good art indeed.) —SB



The Darkroom Handbook
Michael Langford
1981; 352 pp.

$26 postpaid from:
Alfred A. Knopf, Inc.
400 Hahn Road
Westminster, MD 21157
or Whole Earth Household Store

↑

To give a "collapsed" look to an image crumple a sheet of singleweight paper and then spread it out on the frame for exposure to the projected image. Do not use double-weight paper — it tends to crease rather than crumple. Next, soak the paper in water to flatten it prior to development. You will find that parts of the springy paper will often shift during exposure, blurring and adding to the "earthquake" effect. You should use a matte-surfaced paper in order to minimize printing reflections.

Calumet Photographer's Catalog

For mail order photographic gear, Calumet Photographic's prices are consistently among the lowest I've found. While one or two large discount houses might have a desired item priced a few dollars cheaper, the advantage is always lost paying for shipping and handling (and in one arrogant case, a mandatory "Assured Delivery Charge"!) Calumet is among the few who feature a good selection of view cameras, and except for enlargers, orders with payment enclosed are shipped postpaid. All equipment is new and covered by manufacturer's warranty and arrives in original factory packing. Calumet's toll-free customer service line is staffed by helpful, knowledgeable people. Also, buying outside one's home state means not paying sales tax. —Fred Crichton

The Photographer's Catalog

$2 from:
Calumet Photographic
890 Supreme Drive
Bensenville, IL 60106

←

Wide angle versatility . . . 4" x 5" quality.
The Cambo Wide is a rugged, fast shooting, lightweight 4" x 5" with perspective control. Equipped with precision wide angle Schneider lenses.
W470 - With 47 mm f5.6 lens $1575

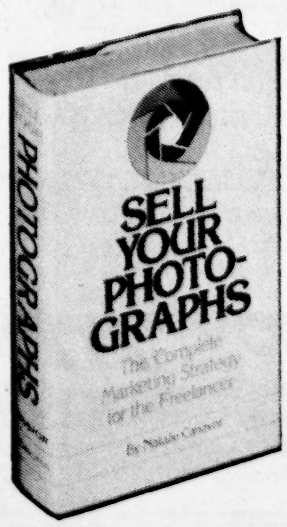
Sell Your Photographs

Like writing, music, painting, performance, and "art" in general, photography commonly lures its hot-blooded devotees into the indifference and disappointments of the freelance market place. Here's a well-done new book on selling, not producing, photographs which should make that freelance sledding less tough. (Surprisingly, I had found virtually no good generalized books on this subject prior to the last few months, and now we suddenly have several, with this being the best I've seen so far.)

As a "Complete Marketing Strategy for the Freelancer," the book covers pretty much every place in which and and manner whereby you can turn images into lucre. Among other instructional goodies, you're told how to: analyze your photos realistically for a given market, unify a photographic theme in a given submission, conceive and write supporting storylines, sell high quality photographs as display art, sell directly to business and industry, price your photos, promote personal image, maintain established trade, and deal with various legal situations regarding photography. With a copy of this book, a recent edition of **Photographer's Market**, *assorted quality equipment, a nearly unlimited film budget, raw talent, reasonable luck, and prolonged perseverance, you too . . . —Lewis Watson*

Sell Your Photographs
(The Complete Marketing Strategy for the Freelancer)
Natalie Canavor
1979; 308 pp.

$15.95 postpaid from:
Madrona Publications
2116 Western Avenue
Seattle, WA 98121
or Whole Earth Household Store



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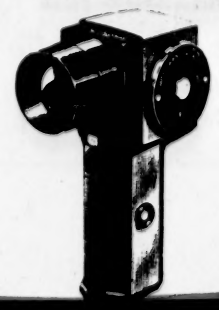
Here are some illustrations of why the idea process works and how it functions. Put yourself in the editor's mind and compare queries 1. and 2. in each case.

1. "I am an experienced photographer who will be travelling around the Far East next month. Is there anything I can do for *Kitty World*?"

2. "I am an experienced photographer who will be travelling around the Far East next month. Would you be interested in a story on 'Cats in the East: Sacred or Supper' for *Kitty World*?"

1. "Since Fourth of July is coming I thought you folks at *Sunday Lifescene* might be interested in a seasonal story. Please let me know."

2. "Every Fourth of July a group called the White Witches of Seaport salutes American Independence in a unique way which is nevertheless fit for family consumption. Luckily I photographed the entire proceedings last year — I am the only photographer ever admitted. Would you like first crack for this year's *Sunday Lifescene* July 4 issue?"



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Pentax SPOTMETER V (a)
. . . . . .$199.95

Photographers' Formulary

Photographers and others who want, by desire or necessity, to compound their own developers, toners, or experiment with arcane photo processes always come up against the problem of obtaining the essential chemicals. It's become rare that photo stores stock a full line of photo processing chemicals, and chemical companies, even Kodak, refuse to deal with individuals.

On the other hand, Photographers' Formulary not only supplies otherwise hard-to-find chemicals at better than competitive prices, but also sells some commercially unavailable developers and kits for non-silver printing processes such as the platinotype, the cyanotype, and gum bichromate. —*Fred Crichton*

Photographers' Formulary
(Chemical and Laboratory Resources) Catalog

free from:
Photographers' Formulary
P.O. Box 5105
Missoula, MT 59806

•

Edward Weston's Amidol Print Developer is the choice of many critical printers. This formula, powerful and heavily restrained, results in silver tones and a magnificent scale. Strong midtones and rich blacks are characteristic; tonal separation is particularly prized. Weston's Amidol works well with silver-rich, thick-emulsion papers popular for finest quality prints but it is also in use with resin coated papers.

To make 1 liter $3.60
To make 2 liters $5.53

Hobby Robotics Company

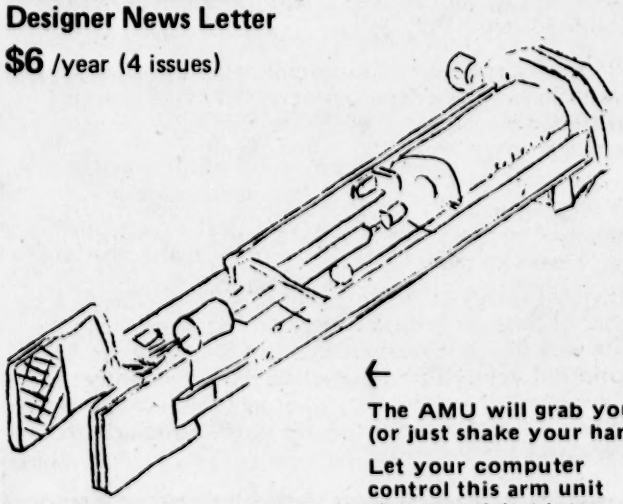
Homebrew robot-making covered in an obsessive cheap mimeographed catalog and newsletter. The catalog lists motors ($35), arm and shoulder units ($75 to $285) and a complete robot (except for microcomputer) for $1495. The newsletter's crammed full of help, ideas, sales pitches, gossip and technical data. They also sell manuals and plans. As the (unnamed) editor/proprietor writes, home robotics now is where home computers were ten years ago. I've merely scanned their literature. If you order something, let us know how they treat you.

—*Art Kleiner*

Hobby Robotics Co.
Catalog
free

Amateur Robotics Designer News Letter
$6 /year (4 issues)

both from:
Hobby Robotics Co.
P.O. Box 997
Lilburn, GA 30247



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The AMU will grab you! (or just shake your hand)

Let your computer control this arm unit via your digital interface — or — via a simple relay controller!

Unit shown just $199.95 assembled. Complete drawings and instructions $10.

Texas Instruments Understanding Series

A sly technique for a large electronics corporation: hook neophytes with well-crafted, enthusiastic introduction manuals that don't just explain how communication/computer systems work, but also why. I've seen two of these: **Understanding Calculator Math** *(which I knew almost nothing about before reading it) and* **Understanding Communications Systems** *(which I knew somewhat better). Both books start at a level of total ignorance and cover the full technology, not just T.I.'s part of it.* **Calculator Math** *explains the basic keys and then takes you through some common business, home, and scientific problems that make you itchy to work out your problems.* **Communications Systems** *is wonderful — I've never seen so much technical detail explained so well in such a small space. Ma Bell uses it to train her publicity people. I've heard the other books in the series are as good.*

—*Art Kleiner*

Texas Instruments Understanding Series
T.I. Learning Center Staff

Understanding Solid State Electronics, 1972, 1978 (3rd Edition), 270 pp.; **Understanding Digital Electronics,** 1978, 264 pp.; **Understanding Microprocessors,** 1979, 288 pp.; **Understanding Calculator Math,** 1976, 1978 (2nd Edition), 224 pp.; **Understanding Communications Systems,** 1980, 288 pp.

$5.25 each postpaid

Understanding Computer Science, 1981, 280 pp.; **Understanding Optronics** (Fiberoptics, lasers, sensors, etc.), 1981, 270 pp.

$7.25 each postpaid

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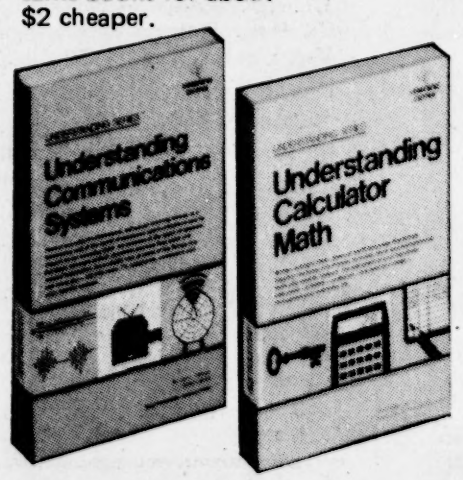
P.O. Box 3640, M/S 84
Dallas, TX 75285

or Whole Earth Household Store

or check your local Radio Shack for special editions of the same books for about $2 cheaper.



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The [1/x] key just takes the number in the display and divides it *into* 1. (By the way – the letter "x", used in calculator keys just means "any number that may be in the display.") The [1/x] key can be used at any time: it acts immediately on whatever number is in the display, and doesn't affect other calculations in progress.

Example:
You're trying to fill a swimming pool and want to speed up the process. You turn on a main fill faucet that would fill the pool by itself in 10 hours, set up a garden hose that would do it in 28 hours, and a fire hose that would take 6 hours on its own. How long does it take with all three working?

Solution:

$$\frac{1}{\text{Time Total}} = \frac{1}{T_1} + \frac{1}{T_2} + \frac{1}{T_3}$$

where T_1, T_2, and T_3 are the times for the faucet, garden hose and fire hose, respectively.

Press	Display/Comments
10 [1/x] [+] 28 [1/x] [+] 6 [1/x] [=] [1/x]	**3.3070866** hours, or about 3 hours, 18 minutes.

—Understanding Calculator Math

City of Women

Thief

GOOD MOVIES

by Sheila Benson

Who could resist the delicious inevitability of Fellini and feminism? In **CITY OF WOMEN** the Maestro circles this walled bastion with wide-eyed fascination. His point of view is affectionate but not condescending, generous, warm, and in some way awe-struck. Fellini has said that women are "myth, mystery, diversity, fascination, the thirst for knowledge and the search for one's own identity." This spellbinding invention is crammed with a little of each.

It is another dream voyage and its chief passenger, Snaporaz, is again the redoubtable Fellini alter image, Marcello Mastroianni, who has middle-aged to perfection. There are three great set pieces on his route: the feminist convention; the house of Dr. Zuberkock and his operatic farewell to sex, and Snaporaz' trial and escape.

That escape takes him up in a balloon, boys, the most spectacular balloon imaginable, a sort of sexy Macy's Thanksgiving Day parade creation. It is a towering replica of Fellini's spectacular new discovery Donatella Damiani. Talk about promises of pneumatic bliss . . . Mastroianni's float into the ozone under her nurturing figure is one of Fellini's happiest images. And it is perfectly in keeping with the times that his reverie be cut short by a female terrorist (also Damiani) who will not allow this sort of idealization – even of her own image. It is one of Fellini's richer brews, occasionally overextended but never dull. I would take five minutes of Fellini against 50 of Cimino any night.

* * *

EYE OF THE NEEDLE, Stanley Mann's adaptation of Ken Follett's best seller, starts (and ends) like a thriller, but diverges midstream to become a character study/love story which is oddly fascinating. Set in wartime England and ending on a remote island north of Scotland, it concerns an actual decoy air force created on the north English coast to draw the German expectations away from the real strike at Normandy.

Director Richard Marquand manages both atmosphere and tension in his story of the spy who could bring all this down, Donald Sutherland as Die Nadel, The Needle, a deep-cover German agent in Britain. The story may raise a few questions – why and how a disabled ex-flier manages to run a sheep farm on this barren, wind-whipped island is only the first, and it does re-tread the "only love sprung from her only hate" theme a bit heavily. Yet the performance of Sutherland (especially) as the bristle-moustached, infinitely resourceful spy, and Kate Nelligan (**Therese Racquin**), as the passionate woman who changes the course of his life, are first-rate. Heaven help the psyche of the film's angelic four-year-old after the course of the film: there's enough trauma for a casebook full of disturbed children.

* * *

THIEF divides people utterly. To some of us it is the most enthralling and all-of-a-piece entertainment to come along this year. Others founder hopelessly on its morality and resent what they see as the glorification of the professional thief. (Doesn't make the life look so wonderful to me.)

In both looks and sound it is a high-tech film in which its director-writer Michael Mann seems to have declared war on the passive audience. With a combination of music (by Tangerine Dream, who did **Sorcerer**), clean, big images and expert editing, Mann draws a portrait of a scarred ex-con who has accepted prison's existential rules ("Nothing means nothing.") as a code for life now that he's outside. Only when he hooks up with Tuesday Weld and the trappings of a normal life does he stray from this bleak philosophy with irrevocable results. It is bravura filmmaking, taut and exhausting, and in it James Caan gives the second best performance of his career.

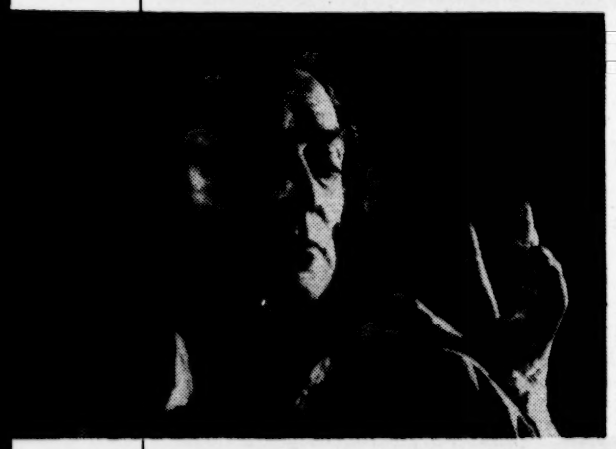
* * *

A pair of not-quite-realistic works recommend themselves highly: Canadian director David Cronenberg's fourth feature **SCANNERS**, and another writer-director, Oliver Stone's **THE HAND**. Cronenberg's thesis is irresistible to anyone bombarded with an onslaught of never-ending information. His "scanners" are poor creatures who have no defenses against hearing the words – and the thoughts – of every other human being near them. Little wonder they are wretched, cowering recluses. But by the use of one drug, a barrier can be set up between them and this onslaught, allowing their enormous powers to be focused.

Eye of the Needle

Cronenberg's best is still **The Brood** with its personification of rage in the form of a malevolent army of monster-children in their Dr. Denton's, born from their brood-mother, Samantha Eggar's anger. But **Scanners** is elegant, spare, even funny. It does drip with blood and you should be braced for its most spectacular effect, the exploding head, but that happens within the first twelve minutes.

The Hand is also the repository of a great deal of the author's untapped rage: against permissive education; human potential movement dabblers; deceitful wives; rednecks; and a score of other scores to settle. You might see it for Michael Caine's many-layered performance of a) either an artist slowly going mad after he loses a limb, or b) a sci-fi horror film in which the severed hand actually exists and is the instrument of his considerable fury. There are awful black and white dream sequences and the last two minutes throw the rest of the film out the window, but Annie McEnroe as the nonchalant



The Hand

coed who puts a firm make on Caine is absolutely marvelous. She's worth a special trip, as is Caine's performance and the fascinating detail of his character.

* * *

Only one direction remains for **SUPERMAN II** to go, and director Richard Lester (and writers Mario Puzo, David Newman, and Leslie Newman) wisely took it. Our hero cannot forever be stopping freight trains or repairing the San Andreas fault with his body, he must look inward, towards his mortality, or lack of it. And that is the direction of this most worthy sequel. Ranged against him are the three interstellar villains imprisoned in the flying mirror from the first film as well as Lex Luthor, but Superman's most formidable problem is Lois. Should she know his identity? Can she be kept from learning it? Should he give up his powers and be simply (a big) mortal, to be with her? (Not to mention what would happen if he

Superman II

didn't give them up? Would Supersex ruin you for all other encounters?) This and a dozen or so other matters of great delicacy are faced in **Superman II** . . . almost all successfully, although it does seem that the effects are not as seamless as they were the first time around. Christopher Reeve is perhaps even better with a little more to do; Margot Kidder's Lois, who is part sex-symbol, part Lucy from "Peanuts," is irresistible; but it is Gene Hackman who nearly pockets the picture.

* * *

The reverse of the coin is the year's least pretentious film, a martial arts film made in South Africa which is so low key yet so droll that it is captivating. Pay no attention to **KILL AND KILL AGAIN**'s title, nor to its prizewinningly inept ads; this is bloodless, small-scaled fun for the whole family. It's really a Knights of the Round Table saga updated, as an

Kill and Kill Again

unquestioned leader (martial arts innovator James Ryan) gathers five knights to go off and do in the dastards. The villains are a Jim Jones-like cult leader whose beard looks like something out of a grade school Christmas pageant, and his paramour, who has a magenta punk crew cut and looks a bit like Divine. The martial arts scenes are wonderfully shot and executed (Norman Robinson, Stan Schmidt, and Bill Flynn may be names you know already), and its unabashed simplicity only works in its favor.

* * *

Meanwhile, over at the real Round Table, John Boorman's **EXCALIBUR** draws you seductively into the world of magic and the birth of myth. Within the first ten minutes you

Excalibur

accept his conventions such as the armadillo-like knights who flail about, upstream and down in full armor with never a thought of rust. Merlin, with his silver skullcap and sparkling staff, is the richest character of the bunch, and the film has a hole in it when he is cryogenically put out of commission for about one-third of the film. Nicol Williamson does this role, potentially the most tiresome sage since Polonius, to a fare-thee-well. He is joined – at his acting level – by Helen Mirren's equally forceful and theatrical reading of Morgan le Fay. The other knights, fervid as they are, don't match these two, and the perky Guinevere is a disaster, yet the sweep and grandeur of the scene and the fascination of the whole Arthurian saga are enough to hold you mesmerized. You might, however, wish Boorman had commissioned music, rather than going for huge chunks of Wagner which, whatever it conjures up, does not convey sixth-century Britain to most people. ■

Content Style Consequence

Survival International Review

This quarterly on endangered tribal peoples is completely fascinating, horrifying, and galvanizing. Somehow it is a great deal more involving than a standard **National Geographic***-style report, I guess the same way an Amnesty International report of torture carries more clout than an item on the subject in, say,* **Time.** *There is such a thing as cultural torture, chronicled here by people who are working to stop it..* *—SB*

Siberut Girl playing the flute

Survival International Review
Jane Safer, Editor
$25 /year (4 issues; includes membership)
from:
Survival International
245 Fifth Avenue, Room 2305
New York, NY 10016

•

Siberut is the northernmost and the largest island in the Mentawai Archipelago, some 100 kilometres to the West of Sumatra, Indonesia. It has a surface area of 4480 sq. km, nearly the same size as Bali. The population density is very low, on average about five persons per square kilometre, with a total of about 20,000. . . .

Major changes did not occur until after Indonesia's independence. In the meantime, both Protestant and Catholic missionaries had settled on the island. In 1954, a decree was issued stating that the island's traditional religion was banned as being heathen and that all islanders were to decide within three months whether they wanted to follow Christianity or Islam. Anyone who had not decided by this time was threatened by the police or the missionary teachers with punishment and had his religious implements burned. Concurrently, the government took steps to centralise and resettle the individual **uma's** scattered at irregular intervals along the river banks into a number of tidy, easily supervised villages, each one with a church and a school. At the same time, the outward appearance of the islanders, for example, their long hair and the glass beads worn by the men, their loin cloths, the habit of pointing their teeth and tattooing their bodies, came under strict control and these signs of unseemly primitiveness were forbidden. . . .

"The appearance of Sibertu has changed markedly since the large American bulldozers have been ripping through the forest and removing thousands of cubic metres of wood. The contract has already been running for 6 months and has an overall duration of twenty years. During this period it is their intention to deforest the entire island of Siberut."

Content Style Consequence

Earth First!

Ecotage has come of age. Incited by Edward Abbey's **The Monkey Wrench Gang,** *many find the fictional drama continuing as they themselves discover motivation to pour sugar into bulldozer fuel tanks or test out their chain saws after midnight.*

Earth First! *is fast becoming the rallying group for those who are frustrated, mad or just want to have fun. The Rocky Mountain media are calling them "militants" but their debut activity was actually quite peaceful: they unrolled a long, long piece of black plastic down the front of Glen Canyon Dam, simulating a crack. They advocate not only the preservation of wilderness but also the reclaiming of land back into wilderness.* *—Shane Smith*

Earth First!
Newsletter
Susan Morgan and
Dave Foreman, Editors
$10 /year (8 issues)
from:
Earth First!
P.O. Box 536
Breckenridge, CO 80424

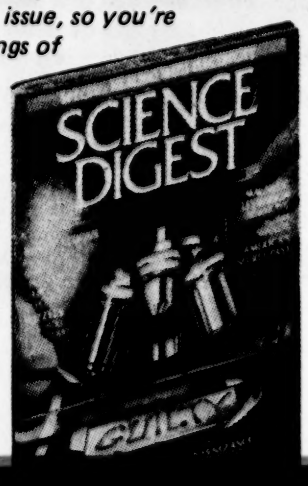
•

Today the lion hunter came. Saw him drive up in red pickup — dented camper on back, gun rack conspicuous. Swept the floor, averted my eyes from the dogs. I knew their hunger. Saw him in his stained buckskin vest, tight over belly, knife on sagging belt. Saw him stop, speak to Joe. Saw Joe's thumb point my way. Kept my head down, swept. Smelled him coming. Heard his splay-footed tread through the open door. "Man out there says you know these hills. Any lions? I got a customer willing to pay good to shoot lion." Didn't answer right off. He spat his juice on my floor. Straightended up, held the broom easy. "You're wasting your time; it's been years since anyone seen lion in this country." He turned, spat again, drove off. Saw him leave. Swept sage dust over the brown spots. We fed. —Marjorie Sill
Reno, Nevada

Content Style Consequence

Science Digest

This Hearst bid for the new market of science watchers nestles right between **Science 81** *and* **Popular Science** *— more item-y than* **Science 81,** *more intellectual than* **Popular Science.** *As for standing, I'd put it ahead of* **Omni** *and* **Discover,** *behind* **Science 81, Popular Science, Scientific American, New Scientist,** *and* **Science News. Science Digest** *has a lot in each issue, so you're likely to find at least a few things of interest each time. The quality is uneven in both content and form.*



Science Digest
Scott DeGarmo, Editor
$13.97 /year (12 issues)
from:
Science Digest
P.O. Box 10076
Des Moines, IA 50350

*I agree with the apparent premise of all these publications that science is the news and the religion of our age. What annoys me about all of them is that science is treated as a spectator sport (***New Scientist** *and* **Scientific American** *do that a little less than the others). Only* **Science** *sounds like scientists. None of the magazines treat their publication itself as the doing of science. None of them gossip. None of them express, except indirectly or second hand, the crazy excited art that goes on at the cutting edge of science. What Carlos Castaneda did feloniously to anthropology and James Watson did exquisitely to molecular biology could be done honestly to all the disciplines.* *—SB*

•

The results are not always bad, however. Edwin E. Robinson was flattened by a [lightning] bolt last June and was out for 20 minutes. When he came to, he could "hear like a kid," even though his hearing aid had been burnt out by the blast. His eyes had been so bad that he'd had no reflex to light. Now he's 20-20. And after being bald for 35 years, he now sports a thick head of hair.

Pacific News Service Individual Subscriptions

This international news service reported about El Salvador four or five months before any other American news people. Their reporters were the only Americans to ask the Iranian students why they were rioting. They consistently asked the brutal questions about topical issues like the Miami riots, housing shortages, low quality in public schools, effects of microelectronics on the workplace — issues that normal news services like AP/UPI cover in **People** *magazine style or not at all.*

When I was a typesetter at a community newspaper, we used to fight over who got to do **PNS** *stories. As a freelance science writer I was treated by* **PNS** *with an editorial grace I've experienced nowhere else (low pay, though; they're struggling). Now they're making their weekly reports (about six stories a week) available to individuals at $125 a year. Expensive but worth it, especially if your local paper doesn't carry them. I'm planning on finding some friends to share a subscription with. —Art Kleiner*

Pacific News Service Individual Subscriptions
Sandy Close, Editor

$125 /year (52 packets) from:
Pacific News Service
604 Mission Street
San Francisco, CA 94105

•

In the midst of a prolonged economic depression which has left 300,000 people unemployed, the city of Detroit is experiencing a remarkable reduction in crime, with robbery and assault dropping 60 percent in some neighborhoods. . .

The cornerstone of Detroit's assault on crime is organized community participation, not on powerless advisory boards, but in a complex network of block clubs and neighborhood groups. The citizens themselves are trained in crime prevention techniques by police, and charged with responsibility for making their own environment secure. Moreover, this participation is not only invited; it is required. To be included in the crime prevention program, at least half the residents of each Detroit block must be actively involved in the organizing effort.

•

"No one has moved away from this block in the last 18 months because the panic is gone," says Alice Szawicz. "We've learned that the neighbors here come from every ethnic group — Black, Polish, Chicano, Arab — and we get along. We care about the same things. It's our own little nation and we look out for each other."

Fanfare

A compendium of record reviews (largely classical) which is published bimonthly. The reviews are excellent, clearly and knowledgeably written by record buffs who are neither inhibited by advertisers nor caught up in their own eccentricities; a welcome change from the more commercial publications. Comparisons with other recordings are freely made and the technical aspects of the disc are discussed as well. Each issue contains 200 to 300 reviews, approximately 600 words in length. What is truly striking is the reviewers' concern and enthusiasm for recorded music; it comes through in almost every review. As a result the publication is as appropriate for the interested layman as it is for the musicologist.
—Alfred N. Garwood

Fanfare
(The Magazine for Serious Record Collectors)
Joel Flegler, Editor

$15 /year (6 issues) from:
Fanfare
P.O. Box 720
Tenafly, NJ 07630

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STRAVINSKY: *Le Sacre du Printemps.* **PROKOFIEV:** *Romeo and Juliet: Suite No. 2.* Minnesota Orchestra conducted by Stanislaw Skrowaczewski. CANDIDE QCE-31108 (quadraphonic), produced by Dennis D. Rooney (Stravinsky) and Tom Voegeli (Prokofiev), $5.98.

Here is a real "best buy": a brilliant performance of *Le Sacre* on one side and of the Suite No. 2 from *Romeo and Juliet* on the other — a total of 65 minutes for $5.98. Skrowaczewski, now concluding his tenure with the Minnesota Orchestra, is one of the most intelligent, probing conductors around today, and his leadership of that orchestra produced one of the more artistically constructive, if less publicized, partnerships of the past couple of decades. Anyone who questions this assertion can sample the recording at hand as evidence.

Skrowaczewski offers a sizzlingly incisive interpretation of *Le Sacre*, in the Boulez vein — with a high metabolic rate and an emphasis on crisp sonorities and clarity of detail. The orchestra responds with terrific ensemble solidity and fine solo playing. This is by far the best low-priced version, and is superior to many that retail for twice as much. In fact, the Minnesota reading of the "Game of Rival Tribes" is the most hair-raising I have ever experienced. The Boulez/Cleveland performance of this tableau sounds muddy by comparison.

How to get "controlled circulation" magazines

I think you ought to acquaint readers with the concept of controlled circulation publications. E.g., I was startled to see **Datamation** listed in the **Next Whole Earth Catalog** (p. 531) at $36/year as I get it, as well as many other publications, free just by filling out a qualification card once a year.

How does one become qualified? By incorporating and giving oneself a title. Certainly there are advantages for communes and cooperatives, etc. to incorporate. It's an inexpensive proposition. Here is a list of the controlled circulation publications I now receive. It is by no means complete: **Infosystems, Computer Decisions, Data Communications, Datamation, MIS Week, Meetings and Conventions, Successful Meetings, Interface, ZIP, Information and Records Management, Multichannel News, The Office, Computer Career News, Computer Systems News, Information Systems News . . .**
—Robert Bezilla
Princeton, New Jersey

I do this too. Usually incorporating isn't necessary; just send them a letter on an official-seeming letterhead that has something to do with the technical specialty the magazine is about. They'll send you a card (the qualification card Bezilla mentions) that quizzes you about how many pieces of computer equipment or whatever you buy a year, so they can justify your free subscription to their advertisers. Some high-level esoteric magazines like **Military Electronics/Countermeasures** *publish information on things like the communications system for the MX missile that you can get no other way. You may have to do some fast talking on the qualification card to get on their list.*

How to find them? Check friends, libraries, bibliographies that match the topic you're learning about. If you have a title try **Ulrich's Guide to Periodicals** *(in most libraries) or directory assistance in New York City or Washington, DC. —Art Kleiner*

Organized Crime Review

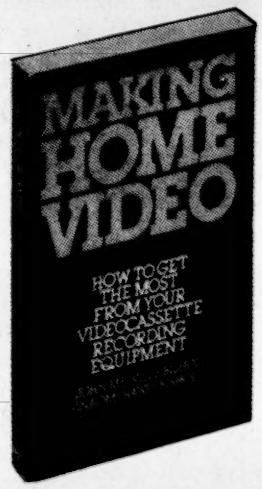
We wrote to this magazine requesting a couple of review copies. Reply:

OCR was terminated 5-1-81. The reason was a total lack of interest on the part of the public and government in doing something about organized crime and the public corruption that attends it. —R.Q.E.

Making Home Video

It is the only book on home video (or home movies for that matter) that is written from the perspective of what someone might actually want to tape, like building a greenhouse or their kids playing with a dog (as opposed to telling how Hollywood faked Moses crossing the Red Sea and you can do it too with a home movie camera and a little help from the wife and kids). The book doesn't get bogged down in either brand names or technical details. It emphasizes how to use the medium elegantly, how to make people look good, how to record an event without intruding on it, and how to make tapes that are interesting enough to want to watch a second time.

—Paul Kyte

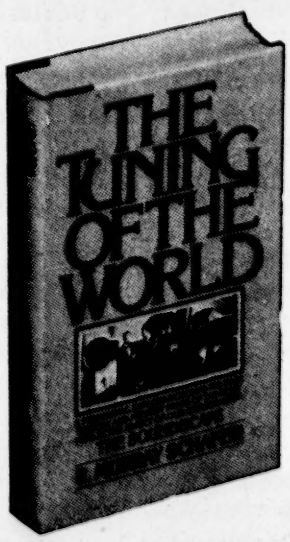


Making Home Video
(How to Get the Most from Your Videocassette Recording Equipment)
John Melville Bishop and Naomi Hawes Bishop
1980; 200 pp.
$9.20 postpaid from:
Wideview Books
1633 Broadway
New York, NY 10017
or Whole Earth Household Store

The Tuning of the World

The soundscape must certainly be the most neglected aspect of our environment, and the invasion of our "acoustic spaces" by twentieth century noise poses one of the greatest threats to our well-being. Canadian composer R. Murray Schafer, in **The Tuning of the World**, *presents the case for intelligent acoustic design in dealing with these problems. Soundscapes of past and present are compared, along with urban and rural, pre- and post-industrial, western and non-western. The richness of non-encroaching sounds of other times and places cries out for appropriate conservation measures, just like any other endangered species.*

—Charles K. Noyes



The Tuning of of the World
(A Pioneering Exploration into the Past History and Present State of the Most Neglected Aspect of Our Environment: the Soundscape)
R. Murray Schafer
1977; 301 pp.
$11.50 postpaid from:
University of Pennsylvania Press
3933 Walnut Street
Philadelphia, PA 19104
or Whole Earth Household Store

●

Electrical equipment will often produce resonant harmonics and in a quiet city at night a whole series of steady pitches may be heard from street lighting, signs or generators. When we were studying the soundscape of the Swedish village of Skruv in 1975, we encountered a large number of these and plotted their profiles and pitches on a map. We were surprised to find that together they produced a G-sharp major triad, which the F-sharp whistles of passing trains turned into a dominant seventh chord. As we moved about the streets on quiet evenings, the town played melodies.

A bare 500-watt bulb clamped to the top of the camera is an easy and effective way to light interiors for a roving camera.

●

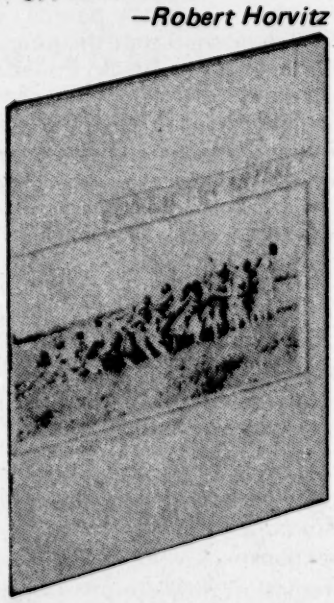
There is a film called *Chicken Soup*, frequently exhibited at documentary film showings, which literally records an elderly couple making a "traditional Jewish chicken soup." Gentiles react to the film as a mildly interesting glimpse of one part of American culture. Jewish audiences are near tears at the end of the screening. One woman told me that she couldn't say exactly what she liked about the film but that it made her "feel so good." People who like the film see their own grandparents in it, and it makes them feel good about their cultural heritage and where they came from. In family video, you hope to get that same resonance, not so much with a broad ethnic group, but with the traditions, peculiarities, and continuity of your family. Your subjects will use phrases, gestures and pronunciations that mark them as kin. Create a documentary style from your family's own style of interaction; don't be bound by the stereotyped and impersonal models available on the nightly news or on talk shows. You are not only obtaining family information while watching a tape, you are reaffirming the common experience of being a family member.

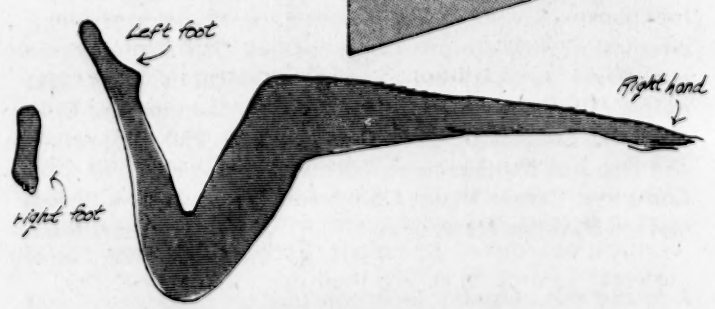
Contact Quarterly

Subtitled "a vehicle for moving ideas," this is a magazine by and for dancers interested in improvisation, movement games, the space between athletics and art. Its patron saints are Simone Forti and Steve Paxton. Has a nice, casual spirit, full of shared energy, serious fun and eccentricity.

—Robert Horvitz

Contact Quarterly
Nancy Stark Smith and Lisa Nelson, Editors
$9 /year (3 issues)
from:
Contact Quarterly
P.O. Box 603
Northampton, MA 01061





Impression left in the sand by a right handed aikido roll. November 1976. [Curt Siddall]

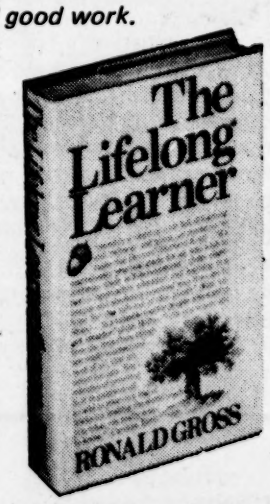
The Lifelong Learner

I went to school for 18 years, which was at least four years too many. Ronald Gross has written a book I could have used in about 1972 that says the way to learn things is to pick something you're interested in and follow it where it takes you — to libraries, free universities, art centers, churches, groups of people interested in the same thing, wise people in your neighborhood, and even, sometimes, school.

The best part is the stories of particular lifelong learners like Ted Marchi, who learned to build roads because his part of Nebraska needed some; Helen Baker, who became a leading expert on juvenile rights with persistence and without a law degree or a college education; and Malcolm X, who taught himself a lot of what he knew in the prison library. The key, as Helen Baker said, is, "When I want to know something, I go and find out." That's a faster and simpler process than wanting to know something and figuring out how to get accredited as an expert in it — a process that takes much time and money and doesn't necessarily teach you what you wanted to know in the first place.

That's the message of this book. When I read it I thought, "Yeah, I know that." Then I remembered it took me 18 years of schooling to figure it out. If you think that you're only a serious learner when you're in school and that you have to stay there or go back to be serious, read this book. It might save you some boredom and wasted effort and yield you some fun and good work.

—Anne Herbert
[Suggested by William A. Draves]



The Lifelong Learner
Ronald Gross
1977; 190 pp.
$4.95 postpaid from:
Simon and Schuster
Attn: Order Department
1230 Avenue of
the Americas
New York, NY 10020

•

"With a shock I realized the way I ran my business was anti-learning. I had no tolerance for mistakes. I wanted everything done right the first time — including the solutions to problems nobody had faced before.

•

The most important tool of free learning is a log — or journal, diary, notebook, whatever you choose to call it. Always have a pad and pencil on hand for jotting down ideas, thoughts, feelings, and even dreams. (It's also useful for keeping track of reminders and random information.)

Cure for psychosis

An old friend of mine had a story about having been an orderly at ISPI (Illinois State Psychiatric Institute), in the incurable psychotic ward. He was an old acid-head, so he didn't have any trouble. They were only crazy, not stupid, so eventually the question would come up, "Hey, how come we're getting it on, but you're out there and I'm in here?" His answer was just, "Well, I don't talk about it as much." So he got fired, because they couldn't tolerate an orderly curing their incurable psychotics.

Neil Rest
Chicago, Illinois

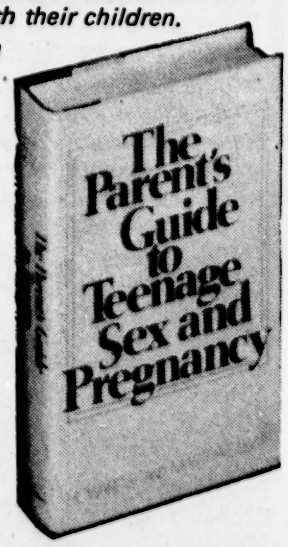
The Parent's Guide to Teenage Sex and Pregnancy

Even the most liberal, sexually liberated parents have considerable difficulty talking to their adolescent children about sex, often assuming (wrongly, as this book documents) that their kids know all they need to know. What the Lewises make abundantly clear is that if you can't talk to your kids about sex, they don't know about it and are, like most teenagers in this country, experimenting sexually with only limited knowledge that is in most cases based on misinformation, myth, and superstition. Nor can a responsible parent assume that a book or high school class on sexuality will take care of the matter: most, as this book reports, cover the subject with little more depth than the old stork or birds-and-bees approaches, and consistently avoid the subjects of contraception and abortion. That adolescents, and even college students, are almost universally abysmally misinformed about sex is manifest in the alarming incidence of VD in young age groups in the country, as well as the pregnancy rate and — not to be lightly dismissed — the prevalence of sexually-related psychological disorders among them.

The Lewises focus first on parental inhibitions in talking to their children about sex, exploring the reasons for such inhibitions — incest taboos, worry over aging, jealousy, possessiveness, overprotectiveness, anger, sexual tensions, guilt, mistaken assumptions about the current "sexual revolution" — and giving realistic advice on overcoming them. They also discuss the inhibitions children feel in talking to their parents and the peer pressure on them to become sexually active before they need, want, or are ready to. Above all, they emphasize the importance of maintaining a non-judgmental attitude in discussing sex with one's children and respecting at all times a child's right to privacy and knowledge.

Having brought parent and child together, the Lewises devote the remaining 208 pages of the book to information the parent should be prepared to provide. This includes techniques and enjoyment of intercourse, practical details, virginity, impotence, communication, self-respect, love, commitment, exploitation, VD, pregnancy, abortion, childbirth, adoption, child-raising and marriage. There is much here that may be new, or at least thought-provoking, to even the most knowledgeable parent, and certainly valuable in discussing with their children.

—Carol Van Strum



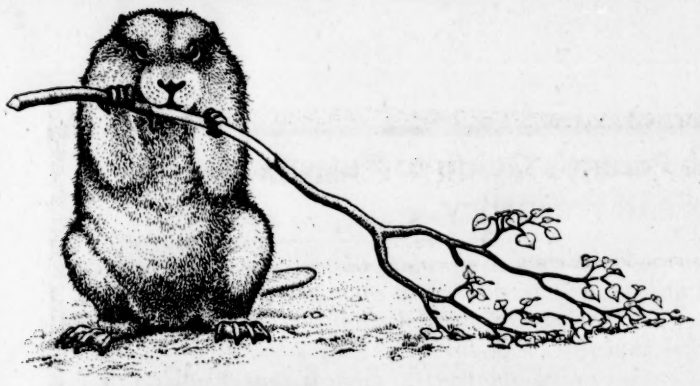
The Parent's Guide to Teenage Sex and Pregnancy
Howard R. Lewis and
Martha E. Lewis
1980; 351 pp.
$14.20 postpaid from:
St. Martin's Press
175 Fifth Avenue
New York, NY 10010
or Whole Earth
Household Store

•

Contraception is touched on in only 39 percent of school sex education programs. Indeed, in some areas teaching about contraception in public schools is illegal.

•

For a minority of women, estimated at as few as 30 percent, this indirect stimulation can bring orgasm. For many more — and this is not widely realized — the action of the penis alone frequently is not enough to lead to an orgasm. To reach sexual climax, most women require more direct stimulation of the clitoris than the penis alone provides.



Beaver trimming a tree

Gadabouts and Stick-at-Homes

Where do bats go in winter? How do beavers build their dams? How old is a lobster? How do bees navigate? Did you know that after thousands of years, megalops still lives at your local seashore?

This is the sort of book I loved as a child and still can't resist. I meet fewer children today who can lie for hours watching a crew of ants haul a dead moth home, a caterpillar spin a cocoon, or a chickadee build its nest. Even fewer are excited by reading about such things. Were such children always rare? This book is for them, wherever they are, however they have aged. And perhaps it will steer some new adventurers toward the variety and mystery of life that lurks in every puddle, tree, brush pile, or patch of sky.

The Milnes write of a natural world they know and love well, always with utmost respect for the intelligence of the reader, young or old. The book is a welcome treat for a young reader, indexed, and beautifully illustrated.

—Carol Van Strum

Gadabouts and Stick-at-Homes
(Wild Animals and Their Habitats)
Lorus and Margery Milne
1980; 116 pp.

$9.95 postpaid from:
Sierra Club Books
P.O. Box 3886
Rincon Annex
San Francisco, CA 94119
or Whole Earth Household Store

↑

On successive nights, the two beavers fell and trim other trees along the river bank. Most will be poplars, with some young beech and slender oak. The current can swing the bare lengths of wood or carry them downstream Some are likely to catch on the first tree the beavers felled and form a loose barrier. Any barricade across flowing water seems to encourage the animals to work harder. Hurriedly they carry more and more branches and mud. They create such a tangle of stout sticks that the water cannot wash away the mud as rapidly as the beavers bring more. Wherever the animals find a hole, they shove in more branches and more mud until they no longer can hear a rush of water. Eventually the barricade becomes a dam. It may create a pond where none has been for more than a hundred years.

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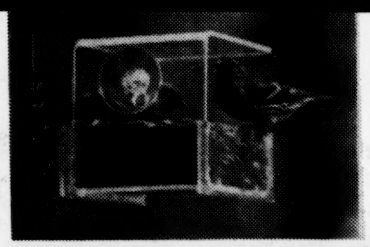
As Gilbert White, an observant naturalist of Selbourne, England, wrote on October 8, 1768, ". . . all nature is so full, that that district produces the greatest variety, which is the most examined."



Duncraft

As a source of bird feeders, bird food, and bird houses, here is competition for the Audubon Workshop **(NWEC** *p. 560). Wild birds coming by on their own time are pretty low maintenance pets, and they aren't slaves.*

—SB

Duncraft
(For the Birds)
Catalog

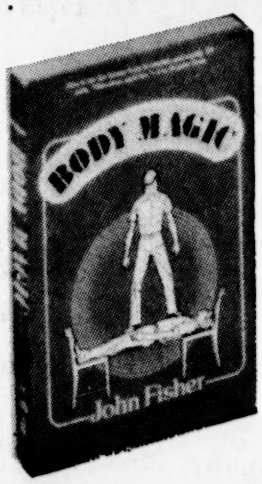
free from:
Duncraft,
Penacook, NH 03303

↑

Enjoy the wild bird activity this feeder will bring close to you. Duncraft's transparent feeder attaches easily to any windowpane and also lifts easily off from its suction cup for refilling. Stock it with sunflower, thistle or mixed seed. Two or more birds can gather here at one time and give hours of watching pleasure. Duncraft's original Classic design, manufactured by us in our shop. 3½" wide. $6.95

Body Magic

114 amazing tricks in one of the all-time nifty books for relieving boredom by performing wonders and transforming your rainy day, dull party, claustrophobic family. That you learn a bunch of physics, biology, psychology along the way is strictly gravy. Just reviewing the book set off a wave of office interactions. "Here, hold your hands like this. Now try to . . ." *—SB*



Body Magic
(How to Use the Human Body to Entertain and Mystify)
John Fisher
1979; 155 pp.

$7.95 postpaid from:
Stein and Day
Scarborough House
Briarcliff Manor,
NY 10510
or Whole Earth Household Store

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Body Trick 112

If these directions are followed with care, it is possible for the heaviest person to appear to achieve weightlessness to the extent that he or she can be raised into the air on no more than the index fingers of four far smaller people.

The person who is going to float must sit relaxed in a straight-backed chair with his legs together, his feet on the floor, and his hands in his lap. The other four participants now stand two on each side of the seated party, one at each shoulder and one at each knee. Instruct all four to extend their arms and place their closed fists together, closed except for the forefingers which should be extended and touching each other along their lengths as shown. The person nearest the seated man's left shoulder is now asked to place his two extended fingers, palms downwards, beneath his left armpit. Likewise, his opposite number inserts his forefingers beneath the right armpit, and again the other two respectively beneath the seated man's knees. Now invite the four assistants to lift the man in this position, using only these extended fingers. However hard they try, it is impossible. As soon as you have registered their inability to do so, ask them to stack their hands alternately, one on top of the other on the man's head, in such a way that no person has his own two hands together, and then to exert a steady pressure downwards. As they keep this up you count to ten. On the count "nine," they must withdraw their hands quickly from his head and resume their earlier positions with their extended forefingers. On the count of "ten" they must try again to lift the man with those fingers alone. This time he he will go soaring several feet into the air with no difficulty whatsoever.

No one has yet produced a satisfactory answer as to why this should work.

BUSINESS

Thank you

Last issue we discontinued inviting Sustaining ($100) and Retaining ($40) Subscribers, but a few slipped in before the formal cut-off. They are here acknowledged and thanked. Maniacal ($1000) – that is, lifetime – subscriptions are still available, and indeed we got two new ones since last time. –SB

Maniacal Subscribers ($1000)

Bamboo Flying Water
Bristol, Vermont
Donna Boyd &
Gene Combs
Lexington, Kentucky
Marlon Brando
Beverly Hills, California
Stephen & Julie Briggs
Centreville, Virginia
Robert Dunn
Sparks, Nevada
Allan Hogle
Gualala, California
Michael O. Johnson
Los Angeles, California
James E. Lovelock
Launceston, Cornwall
England
Douglas Martin
Sausalito, California
Norman Pease,
Orinda, California
Ron Pruitt
Davis, California
Katherine W. Tremaine
Santa Barbara,
California
Greg & Pat Williams
Gravel Switch,
Kentucky
and 4 anonys

Sustaining Subscribers ($100)

Wendy & Joel Bartlett
Los Altos, California
Arthur Hayssen
Sebastopol, California

Retaining Subscribers ($40)

Steven Bagley
Cambridge,
Massachusetts
A. & B. Banner
Beverly Hills, California
Olga Bean
San Jose, California
H. Blackmer
Wolfville, Nova Scotia
Canada
Abi Dickson
Unalaska, Alaska
Michael A. Ekberg
Sunnyvale, California
Lucien Favret
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Nancy Lennstrom
Seattle, Washington
Maryann Mitchell
Mill Valley, California
Stephen Paul
Kansas,City, Missouri
R. Sharp
Goleta, California
David V.M. Stephen
Tucson, Arizona
Aza Summers
Hilo, Hawaii
and dos anonos

CoEvolution Quarterly – Spring 1981 Financial Report

EXPENSES	Nov, Dec, Jan	Feb, Mar, Apr
Salaries and fees		
Office	$ 28,303.14	$ 25,305.97
Production	10,386.86	10,261.48
Editors	12,065.20	13,440.80
Contributors	5,449.00	7,490.00
Office rental, materials, etc.	23,079.31	23,304.99
Phone	1,851.86	1,980.09
Promotion	7,353.12	833.42
Printing	35,499.40 (50,000 copies)	37,929.09 (52,000 copies)
Subscription process and mail	33,719.52	19,845.35
Shipping	1,325.33	1,337.45
Business reply	2,450.00	900.00
Refunds	750.00	900.00
Total	$162,232.74	$143,528.64
INCOME		
Subscriptions, gifts and renewals	$190,072.85	$ 66,289.94
Retaining and Sustaining	2,290.00	2,123.36
Back issues	4,170.50	2,354.00
Distribution	11,413.49	16,614.40
Total	$207,946.84	$ 87,381.70
NET GAIN OR (LOSS)	$ 45,714.10	($ 56,146.94)

POINT Financial Report

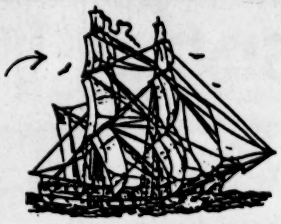
	Feb, Mar, Apr 1981
CQ (detail above)	
Income	$ 87,381.70
Expense	143,528.64
Next Whole Earth Catalog	
Income:	
Royalties	117,310.30
TV rights	2,000.00
Other sales	7,488.51
Expense	35,205.18
Other products (posters, maps, T-shirts, etc.)	
Income	6,721.51
Expense	4,173.27
POINT	
Income	-0-
Expense	
Miscellaneous	1,072.97
Donations/grants	629.00
TOTALS	
INCOME	220,902.02
EXPENSE	184,609.06
NET GAIN OR (LOSS)	$ 36,292.96

POINT Balance Statement 30 April 1981

ASSETS	
Cash in bank	$ 13,822.05
Investments	39,635.49
Accounts Receivable Distributors	36,967.64
INVENTORY	
Back issues, CQ	183,074.00
Other products	8,974.43
NWEC*	
LIABILITIES	
Accounts payable, current	-0-
long-term	-0-
Subscription liability	319,908.00
Cost of NWEC*	

*NWEC sales and inventory will be reported in next CQ.

CoEVOLUTION Quarterly



Editor
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Kathleen O'Neill, David Wills

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Anne Herbert

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Kara Adanalian

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Don Ryan

Production Traffic
Jonathan Evelegh

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J. Baldwin

Land Use
Richard Nilsen, Peter Warshall

Learning
Carol Van Strum

Art
Robert Horvitz

Film
Sheila Benson

Medical
Tom Ferguson, M.D.

Next Whole Earth Catalog 2nd Edition Update
Anne Nilsson, Charles Cagnon, Faith Harrington, Angela Gennino, David Theis

POINT Board
Richard Baker, Michael Phillips, Paul Hawken, Stewart Brand

Mailing Services
Mailing Management, San Francisco

Mailing List Services, Oakland

Printing
Warren's Waller Press, San Francisco

Synthex Press, San Francisco (bindery)

Glue-fold Company, Menlo Park (envelopes)

Marinstat, Mill Valley (stats and halftones)

CTS, San Francisco (display type)

Best and Worst Sellers from The Next Whole Earth Catalog

This report from the Whole Earth Household Store reflects mail order and counter book sales from October 1980 to May 1981.

1. The Next Whole Earth Catalog – 700 copies
2. The Atlas of Sexual Pleasures – 490
3. My Secret Garden – 235
4. A Manual on Sharpening Hand Woodworking Tools – 225
5. Show Me – 220
6. Mail Order Moonlighting – 210
7. How to Get Control of Your Time and Your Life – 200
8. How to Do Leaflets, Newsletters and Newspapers – 200
9. Earning Money Without a Job – 190
10. The Incredible Secret Money Machine – 185
11. Small Time Operator – 180
12. A Pattern Language – 175
13. The Food and Heat Producing Solar Greenhouse – 175
14. Survival, Evasion and Escape – 170
15. The Seven Laws of Money – 170
16. Howard Sams Crash Course in Microcomputers – 140

A number of books surprised the Household Store staff with their popularity, especially:

- All of the underground house books
- **Tissues and Organs**
- **Systemantics**
- **Out of Revolution**
- **Woodland Ecology**
- **The Times Atlas of World History**
- **Harnessing the Earthworm**
- **Human Engineering Guide**
- **Lifetime Reading Plan**

The worst selling books (0 to 3 copies) were:

- **The Complete Book of Running**
- **The Design and Creation of Jewelry**
- **The Joy of Soaring**
- **TV Guide Almanac**
- **Contemporary Music Almanac**
- the Tolkien books
- **Last Rights**
- **American Building**
- **Nature to be Commanded**
- **Almanac of American Politics**
- **Return to the City**
- **The Art and Adventure of the Woodstove**
- **Great Moments in Architecture**
- **Field Guide to the Birds of Texas**

Send your vote, with remittance, to:

Whole Earth Household Store
Building D
Fort Mason Center
San Francisco, CA 94123

"Or Whole Earth Household Store"

That phrase under access information in the **CoEvolution Quarterly** means you can mail order the item from:

Whole Earth Household Store
Fort Mason Center, Building D
San Francisco, CA 94123

All orders: Add $2 packaging and delivery per order.

Rush orders U.P.S. (United States): 40¢ additional charge per book.
Foreign orders (surface mail): 50¢ additional postage per book past the first two. International Registry Insurance (add $3 per order) is recommended.
California delivery: Add 6% tax (BART counties 6½%).
VISA/MasterCard orders accepted.
Telephone (415) 441-7250

Or visit the new Household Store in San Francisco's Fort Mason Center, Building D, open from eleven to six, Tuesday through Saturday.

Do not send Household Store orders to **CoEvolution Quarterly**.

DONALD RYAN

Volleyball-court's-eye view of Don Ryan.

Gossip

After all those broken ankles through the years on the volleyball court, it's refreshing to explore a new injury — amnesia. Don Ryan was retrieving the ball from on top of one of the storage containers looming 12 feet over the court. On his way down both of his feet tangled in a wire and he pitched — nightmare! — face-first into the packed-dirt court.

Out of the heap of Don on the ground came a frightening growly howling for a while. Then he sat up, cheerily displayed no grave injury, and walked inside for a shower. When he came out, he said, "What happened?" He was told, in relieved detail. "What happened?" he asked again. And again and again. It was written down for him. He asked, studied the note, asked, studied the note. Creeepy.

Other lapses were becoming apparent. He didn't know people's last names. Didn't know his new girlfriend's name, or that he had one. He was carted off to Marin General Hospital for observation, going through another 50 rounds of "What happened?" To bureaucratic inquiry, he wasn't sure if he was married or had kids (neither). Everything that other staff reminded him had happened recently seemed to Don as if it happened five years ago, and everything happening at the moment seemed also to be a repeat from years ago. He was talkative, giddy, hilarious, and uncharacteristically raunchy with anyone female. The hospital diagnosed broken forearm, cracked ribs, and concussion.

I'm going into all this not to make Don look like the idiot he isn't, but to clarify something that isn't in the books. People act weird after concussion. You don't get that from first aid manuals, or from detective stories, or anyplace except experience. It's subclinical and therefore is treated as if it doesn't exist — like permanent bodily changes from birth control pills. Concussion effects, fortunately, are temporary; Don was fine the following day. Memory of the accident itself hasn't returned and probably won't.

In order not to feel so helpless next time, the **CQ** *staff as a whole is taking a 6-hour first aid and CPR course.*

Other news. A shocking number of **CQ** *contributors are becoming editors and such. R. Crumb has started his own quarterly,* **Weirdo**, *which is exploring well beyond the usual range of even underground comix with his own stuff and others that he's finding. Dan O'Neill has accomplished the full immersion in "politics of place" by taking on the editorship of his local* **Nevada County Independent**, *a weekly (Drawer 38, Nevada City, CA 95959, $9/year). Circulation is booming. Peter Spectre, co-editor of the oceans issue of* **CQ** *(Fall '79), has become associate editor at* **WoodenBoat**, *and his old partner George Putz is doing features for the magazine. Various stories by Ron Jones from* **CQ** *are appearing on network TV — "The Acorn People" (about disabled kids at camp) was on a couple months ago; "The Third Wave" (about high school Naziism) will be on ABC this Fall.*

I ran into Jan Adkins, **CQ** *illustrator and author of such books as* **Moving Heavy Things** *in his new role as a graphics editor for* **National Geographic** *at the launch of the Space Shuttle. He was happy and so was the launch. Glowing, rising madonna-statue on top of a towering white pedestal of exhaust, then leaving that into the dawn Sun. That and the Shuttle landing and the dedication of "The Gregory Bateson Building" — Sim Van der Ryn's solar office building in Sacramento, a first in the world — were occasions for enjoyable reunion with Governor Brown.*

J. Baldwin is leading a three-week trip to rural China next winter, December 12 to January 5. It costs $1900 (plus about $800 air fare) from New Alchemy China Program, 237 Hatchville Road, East Falmouth, MA 02536. "These trips are unique in that we don't have a chaperon for about a third of it, and have bikes furnished, bus tokens, etc."

Weirdo
R. Crumb, Editor
$11 /year (4 issues)
from:
Last Ghasp Eco Funnies
P.O. Box 212
Berkeley, CA 94704

Dan O'Neill's self-portrait in The Nevada County Independent

Finally, it's not your eyes, the **CQ** *is wider than it used to be. David Wills it was who realized we were trimming off surplus paper and suggested stopping. Our previous page size was designed for easy xeroxing, and we wanted to keep that feature, as well as item transferability into future editions of* **The Next Whole Earth Catalog**, *so we widened the margins by ½ inch every page. That adds up to 5½ square feet an issue, 22 square feet a year, at no extra charge.*

A few stubby pulpwood blue spruce in Nova Scotia are breathing sighs of relief that they're not being wasted on the printshop floor. —SB

How to Submit Things to The CoEvolution Quarterly

1. Send them. *Address them to Box 428, Sausalito, CA 94966 and drop them in the mail. We are sitting here, being bored as anyone else, reading all the mail, hoping some of it will be good.*

What's good? New, not read a hundred times before, not an imitation of old CQ *articles, often a personal passionate statement. Articles that sound like articles are often dead. Consider yourself to be writing a letter to an intelligent, uninformed friend about something that is interesting/important to you. We often print things that everyone, including the author, thought were too odd to be printed anywhere. Remember that we print all lengths from a paragraph to many pages, so don't puff a good, short idea into four tedious pages. And please don't try to please us by creating something you think we'll like. Being hustled is boring. We'd rather print true love — yours for your subject.*

All things are possible and may be printed. We have no editorial policy for or against any subject matter.

2. Enclose a stamped, self-addressed envelope. *That's courtesy. You are much better at writing your address than we — all that practice. If you don't address and stamp an envelope for us to reply or return things in, you're asking Andrea or Stewart or someone to be your secretary. If we all did our own clerical work, there would be no secretaries.*

3. Keep a copy. *We are careful and good but not perfect. You should never send anyone the only copy of anything.*

4. Be sort of patient. *We often reply on stuff the day we get it, but you shouldn't get worried about no reply for about a month. Sometimes we have to show things to our far-flung, part-time editors, and that takes a while. On the other hand, don't wait a year to tell us you sent something and didn't get an answer. Many manuscripts have flowed over the desk in that time, and it will be hard to remember what happened to yours or if we ever saw it.*

5. Be legible and put your name and address on the first page of the manuscript. *Those are all the rules of form we have. It's helpful to type if you have a typewriter, but handwriting is fine if it's neat. The name and address are so you don't become a mystery person if your envelope gets separated from your manuscript.*

6. Avoid query letters. *Query letters are what writer's magazines tell you to send editors to find out if they are interested in a subject. We're less interested in the subject than in what you do with it. If at all possible, please send us the manuscript.*

Exception: You have found an interesting and complex subject that would take a lot of time and work to write about. If you want to know if CQ *might be interested before proceeding, write a detailed, fact-filled letter about what you know and what you want to do, and send samples of your writing. The details and the samples might make it possible for us to make an intelligent reply. But in every case, it's better to send a manuscript than a query. Naked queries from people we don't know yet just make us anxious.*

7. Notes on Book Reviews. *Write to that smart ignorant friend, introduce the book and get out of the way. A paragraph should usually be enough. The quotes are the thing — ideally they should be immediately useful and contain the soul of the book. You don't have to type the quotes, just note page numbers. It's not necessary to analyze the book; just say exactly why you love it.*

It can take a long time to get a final decision from us on a book review. We don't decide about printing it until we've seen the book, which we order from the publisher, who may take a couple of months to send it. (Don't you send the book unless you don't want it back; it's hard enough to deal with returning manuscripts.) However, we will tell you right away if we consider your review a possibility and will return it right away if we don't.

We like to review books of all ages, especially unheard of wonders that got lost in some shuffle.

8. Money. *$15 to $30 for letters and $150 to $300 for articles. The article money varies depending on length, wonderfulness and provision of illustrations. Item reviews work like this — you get $15 for being the first to suggest an item and $15 for reviewing it. If you do both, you get $30. You get paid on publication.*

9. Will you still love us if we reject your offering? *Editing is arbitrary. It's hard to explain why any given piece is rejected. To understand that, picture yourself leafing through a magazine, not liking an article, and suddenly being confronted by the author who wants you to explain why you didn't like the article. A cogent explanation would be somewhere between awkward and impossible and definitely time consuming. Our rejection notes tend to be short. It has to be that way if we're to have time to read all the mail carefully. If we turn down your piece, we may not convey in the note that we are grateful for all mail, that mail is all we've got, that the magazine would not exist if it weren't for mail from strangers who are good enough to share the wonders of their world with us.*

We're waiting to hear from you.

—Anne Herbert
for the CQ *staff*

P.S. Address your goods to Stewart Brand or to Assistant Editor Stephanie Mills. —AH

Letter-writing versus review-writihg

The video review on p. 138 is not the review the man sent but the letter he wrote about the review. Compare them yourself. Nearly every time that somebody sends both a letter and a review we wind up printing the letter.
—SB

Dear Mr. Brand:

I recommend this book, **Making Home Video** for review in the **CoEvolution Quarterly**, the future **Whole Earth Catalog**, and the Whole Earth Household Store.

It is the only book on home video (or home movies for that matter) that is written from the perspective of what someone might actually want to tape; like building a greenhouse or their kids playing with a dog (as opposed to telling how Hollywood faked Moses crossing the Red Sea and you can do it too with a home movie camera and a little help from the wife and kids). The book doesn't get bogged down in either brand names or technical details. It emphasizes how to use the medium elegantly, how to make people look good, how to record an event without intruding on it, and how to make tapes that are interesting enough to want to watch a second time.

I have enclosed a copy of the book (I bought a batch to give to friends) and a copy of a review I wrote which you can use or not as you wish.

Yours, Paul Kyte, West Newbury, Massachusetts

Making Home Video

No product hype in this book, just sound advice on making tapes of family, friends, and community that look good and don't bore people. The technical stuff is tucked away in an appendix. The author is a documentary film/video maker who considers home video a specialized genre of documentary. Also a good introduction to using consumer equipment for community advocacy, oral history, and low budget professional projects. Funky illustrations.

—Paul Kyte

Is your check enclosed? We do not bill.

"Jumping. A running straight high jump." From Muybridge's **Complete Animal and Human Locomotion***

* Eadweard Muybridge, whose photographic career was sketched in this space last issue, is best known for his 781 pioneering motion study plates, one of which is sampled on the envelope. He is probably second best known for an incident in 1874 that began when he intercepted a letter sent to his wife Flora by Major Harry Larkyns. As soon as he read the letter, he travelled fifty miles north from San Francisco to the house in Calistoga where the major was staying. He asked if Larkyns was there and was told that he was and invited in. Muybridge politely refused and said he only needed to see the major for a moment outside. Larkyns came out and said, "Who is it? I can't see you." Muybridge said, "Good evening, Major, my name is Muybridge and this is the answer to the letter you sent my wife," and shot him in the chest. Larkyn

over

Eadweard Muybridge's **Complete Human and Animal Locomotion**, 1887, 1979; 3 volumes, 3265 pp. is available for $100 post-paid from Dover Publications, 180 Varick Street, New York, NY 10014.

died a few minutes later. Muybridge was immediately arrested without resisting and tried for murder. His defense was that the letter said that his son wasn't his son and that "the revelation of my wife's infidelity was a cruel prostrating blow to me, shattering my idol and blighting the bright affection of my life. All right minded people will justify my action." His attorney's defense was that Muybridge was insane. Two things used to support this view were some photographs Muybridge had taken in Yosemite from very precarious spots and the fact that he would not take a photograph he wasn't interested in, regardless of how much money he was offered. The jury deliberated for thirteen hours and found him not guilty. Muybridge lived twenty years more and did his most notable motion studies in that time.

—Anne Herbert

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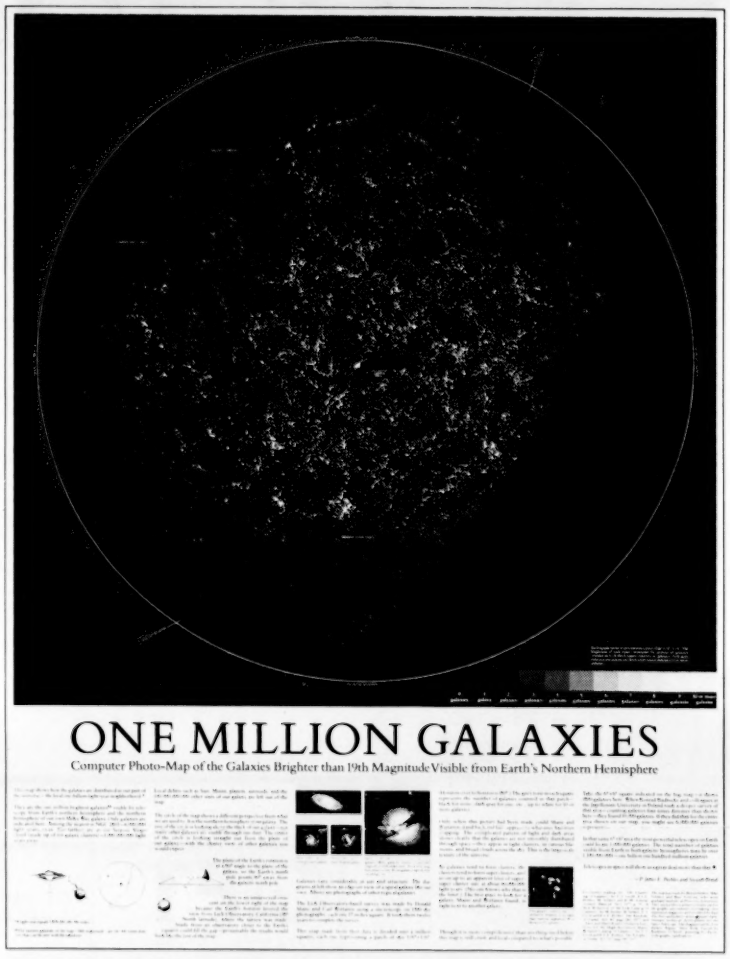

One Million Galaxies Map 39" x 47"
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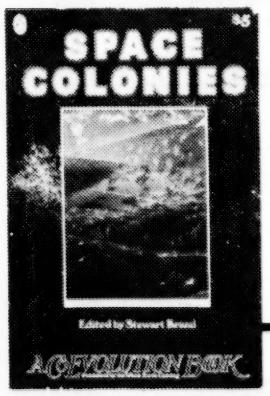
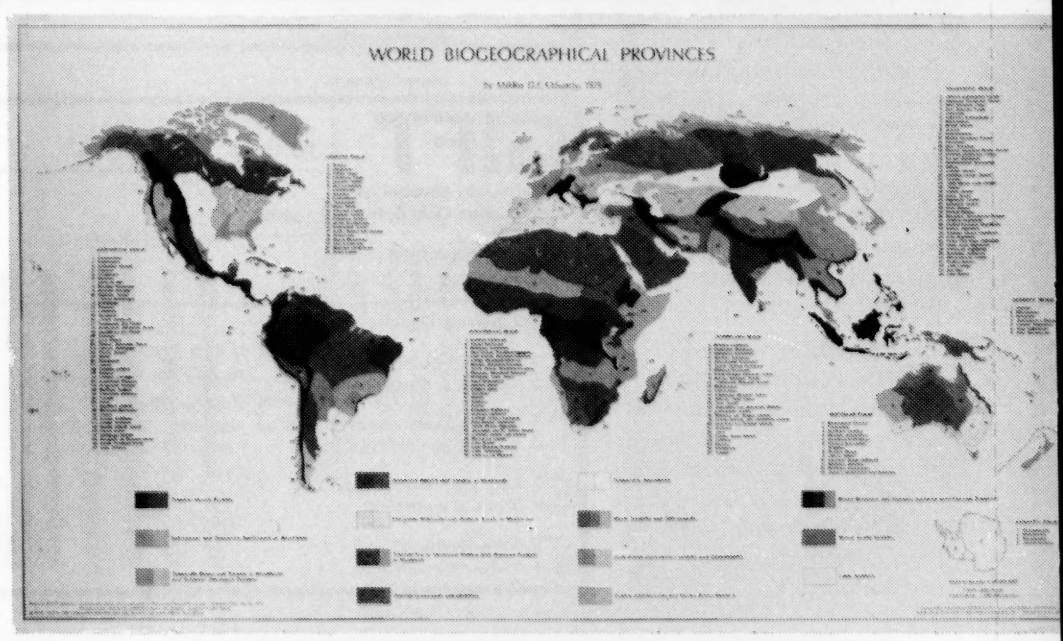
—Philip Morrison, **Scientific American**



Space Colonies book $4.50

The space colony dream and recent space efforts evaluated by physicist Gerard O'Neill, astronaut Rusty Schweickart, Carl Sagan, Governor Jerry Brown, E.F. Schumacher, Ken Kesey, Paul Ehrlich, Paolo Soleri, John Todd, R. Buckminster Fuller, and many others. 160 pages, indexed.

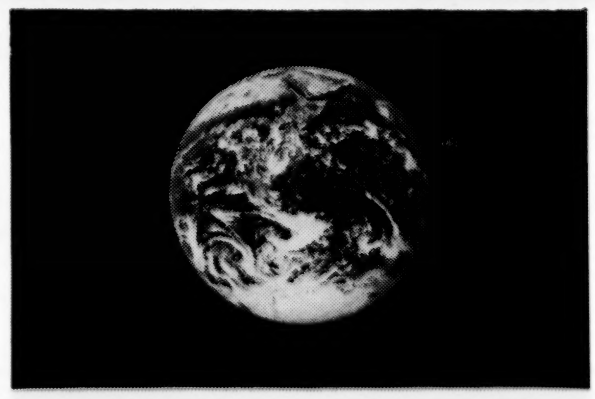


World Biogeographical Provinces Map $3.50

Charting biological politics which transcend nationality, Miklos Udvardy's map "can be a guide to locating the kind of country in which you feel at home," says Ray Dasmann, whose classic article "Biogeographical Provinces" accompanies the map. The first two printings of this 39" x 22" wall-full sold out; the third presented an opportunity for correction and refinement.

Whole Earth Post Cards $3 for ten cards

Home sweet home sharply photographed from the reaches of space. 4" x 6" cards eminently suited for succinct correspondence. We use them ourselves.



The Next Whole Earth Catalog $14

"... a hard act to follow, but the new catalog is better researched, better designed, and more profound than the 'Last'."
—The Christian Science Monitor

"... a perfectly splendid catalog and, yes, a useful tool ... I found myself informed, entertained and enticed ... Since the Catalog is imaginatively organized and illustrated and consists mostly of recommended books and tools, turning its pages is akin to browsing through a combined book and hardware store – in other words, great fun. Along with the fun, a reader cannot help being impressed by the abundance of solid fact, obviously the result of devoted effort by an energetic staff."
— New York Times Book Review

"Quality again follows quantity; it is a prize ... The 600 pages offer coherent reviews of good books old and new and keen judgments of specialized magazines, all of them shrewd guides to sources, both of knowledge in print and of the tools of almost all trades ... A glow of goodwill, courage, reason and profound engagement suffuses this remarkable volume, a reference compendium for hardware and software, plumbing and philosophy, at once traditional and iconoclastic."
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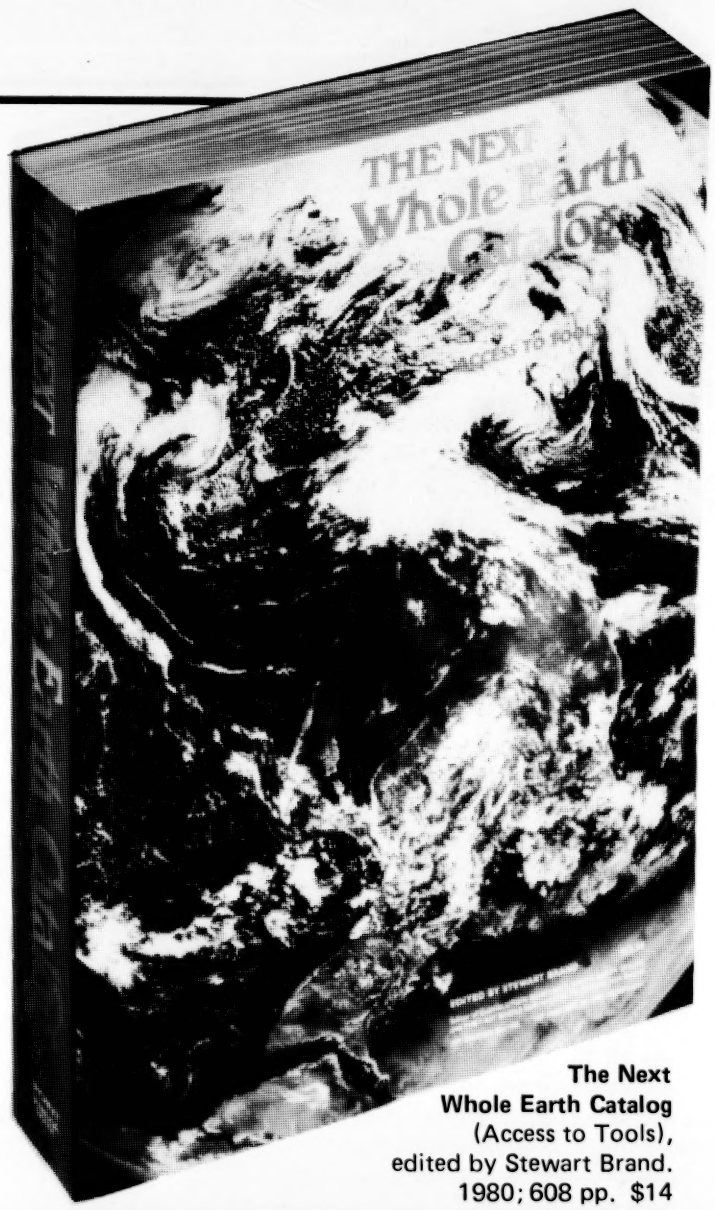


The Next Whole Earth Catalog
(Access to Tools),
edited by Stewart Brand.
1980; 608 pp. $14

CoEvolution Quarterly $14 per year

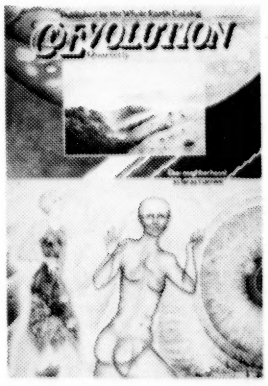
As it carries no advertising (except this right here), **CoEvolution** tries to take maximum advantage of that freedom. We are limited to no subject area and don't have that second-hand fear of readers that advertising encourages. So far as we know, **CQ** is the only general interest magazine in the world supported solely by its readership.

Back Issues $3

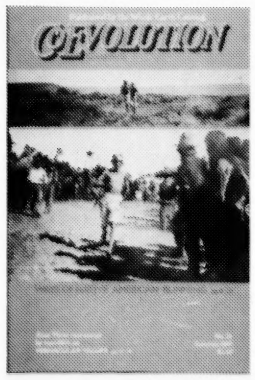
Issues 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 28, and 29 are available. (Issue 27 was **The Next Whole Earth Catalog** and is not available as a back issue.) The regular issue of the **CoEvolution Quarterly** is $4.

No. 29, Spring 1981
Robert Frank returns to still photography on the covers and reports on his new movie inside. Also articles on computer slang, homeopathy, a unique alternative college that has been working for 65 years and disintermediation – the economic process that frees people from inflationary institutions.

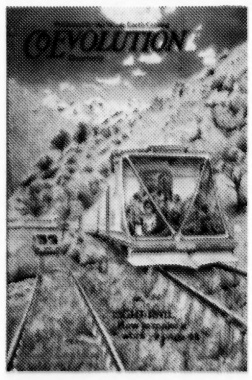
No. 28, Winter 1980
Guest edited by Anne Herbert, includes an account of the death of Gregory Bateson by his daughter Mary Catherine, an attack on the evils of circumcision, good news about neighborhood life from the editor and others, and Orville Schell on the dangers of feeding antibiotics to livestock.



No. 26, Summer 1980
Native American running, an extensive article on amateur insemination by lesbians, Ivan Illich on vernacular values, Lynn Margulis on a new theory of how evolution happens, and "Some Peculiarities of the Cat, Harley."



No. 25, Spring 1980
Turning back the desert by planting trees, using light rail to revive public transportation, James Lovelock on being a self-employed scientist, "Our Enemies, Ourselves" (on Russia), and an article on Shramadana – sharing energy.



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